FILE 'REGISTRY' ENTERED AT 10:40:35 ON 15 MAY 2007

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 MAY 2007 HIGHEST RN 934733-40-1
DICTIONARY FILE UPDATES: 14 MAY 2007 HIGHEST RN 934733-40-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

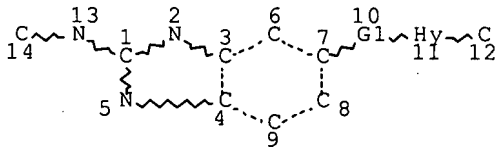
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

L1 STR



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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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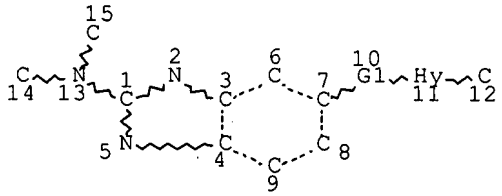
NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE
L2 (1369) SEA FILE=REGISTRY SSS FUL L1
L3 STR



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NODE ATTRIBUTES:
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
L4 2 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

FILE 'CAPLUS' ENTERED AT 10:40:35 ON 15 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 15 May 2007 VOL 146 ISS 21
FILE LAST UPDATED: 14 May 2007 (20070514/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

L5 2 L4

L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:513393 CAPLUS Full-text
DOCUMENT NUMBER: 141:71544
TITLE: Preparation of substituted benzazoles as Raf kinase inhibitors
INVENTOR(S): Amiri, Payman; Fantl, Wendy; Levine, Barry Haskell; Poon, Daniel J.; Ramurthy, Savithri; Renhowe, Paul A.; Subramanian, Sharadha; Sung, Leonard
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 476 pp., Cont.-in-part of U.S. Pat. Appl. 2004 87,626.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

US 2004122237	A1	20040624	US 2003-675927	20030929
US 2004087626	A1	20040506	US 2003-405945	20030331
US 7071216	B2	20060704		
AU 2004277405	A1	20050414	AU 2004-277405	20040929
CA 2539748	A1	20050414	CA 2004-2539748	20040929
WO 2005032548	A1	20050414	WO 2004-US32161	20040929
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1675584	A1	20060705	EP 2004-789345	20040929
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BR 2004014908	A	20061107	BR 2004-14908	20040929
CN 1913884	A	20070214	CN 2004-80032677	20040929
JP 2007507428	T	20070329	JP 2006-528331	20040929
JP 2006193533	A	20060727	JP 2006-96143	20060330
IN 2006KN00838	A	20070413	IN 2006-KN838	20060405

PRIORITY APPLN. INFO.:	US 2002-369066P	P 20020329
	US 2003-405945	A2 20030331
	JP 2003-579810	A3 20030331
	US 2003-675927	A 20030929
	WO 2004-US32161	W 20040929

OTHER SOURCE(S): MARPAT 141:71544

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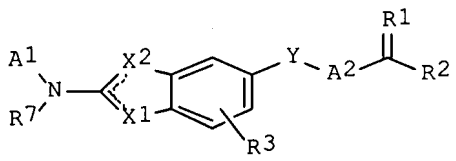

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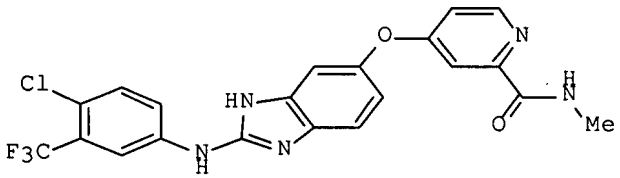
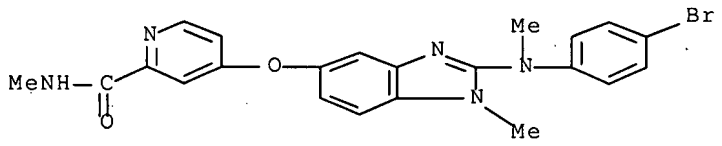


II

AB The title compds. I [wherein X1, X2 = N, NR4, O, S (with provisos); Y = O, S; A1 = (un)substituted alkyl, (hetero)cycloalkyl(alkyl), (hetero)aryl(alkyl), etc.; A2 = (un)substituted heteroaryl; R1 = O, H; R2 = NR5R6, OH; or CR1R2 = (un)substituted heterocycloalkyl, heteroaryl; R3 = H, halo, alkyl, alkoxy; R4 = H, OH, (di)alkylamino, alkyl; R5, R6 = H, (un)substituted (cyclo)alkyl, alkoxyalkyl, aminoalkyl, amidoalkyl, acyl, heterocyclyl, (hetero)aryl, etc.; or R5 and R6 are taken together to form (un)substituted heterocyclyl or heteroaryl; R7 = alkyl; and pharmaceutically acceptable salts, esters, or prodrugs] were prepared as Raf kinase inhibitors. Examples include synthetic methods and phys. data for 1400 compds., as well as descriptions of two Raf kinase bioassays. For instance, 4-amino-3-nitrophenol and (4-chloropyridin-2-yl)-N-methylcarboxamide were coupled using potassium bis(trimethylsilyl)amide and K2CO3 in DMF to give 4-[(4-amino-3-nitrophenyl)oxy]-N-methylpyridine-2-carboxamide. Pd-catalyzed hydrogenation, followed by cyclization with 4-chloro-3-(trifluoromethyl)benzeneisothiocyanate in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide•HCl in THF provided the benzimidazole II. One thousand ninety-four compds. inhibited Raf kinase activity with IC50 < 5 μM in a Raf/Mek filtration assay or a biotinylated Raf screen. Thus, I and their pharmaceutical compns., which may comprise at least one addnl. agent, are useful for the treatment of Raf kinase mediated disorders, such as cancer (no data).

IT **611215-02-2P 611215-10-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Raf kinase inhibitor; preparation of substituted benzazoles as Raf kinase inhibitors for treatment of cancer)

RN 611215-02-2 CAPLUS
CN 2-Pyridinecarboxamide, 4-[[2-[(4-bromophenyl)methylamino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI) (CA INDEX NAME)



RN 611215-10-2 CAPLUS
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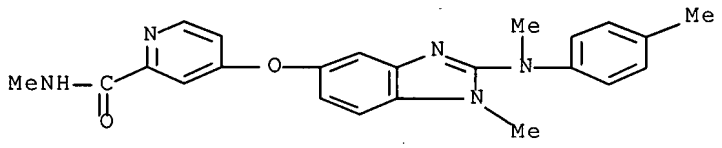

L5 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:796477 CAPLUS Full-text
DOCUMENT NUMBER: 139:307759
TITLE: Preparation of substituted benzazoles as Raf kinase inhibitors

INVENTOR(S): Renhowe, Paul A.; Ramurthy, Savithri; Amiri, Payman; Levine, Barry Haskell; Poon, Daniel J.; Subramanian, Sharadha; Sung, Leonard; Fantl, Wendy
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 259 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082272	A1	20031009	WO 2003-US10117	20030331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2003226211	A1	20031013	AU 2003-226211	20030331
EP 1499311	A1	20050126	EP 2003-745683	20030331
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BR 2003008854	A	20050222	BR 2003-8854	20030331
CN 1655779	A	20050817	CN 2003-812193	20030331
JP 2005529089	T	20050929	JP 2003-579810	20030331
NZ 535985	A	20070427	NZ 2003-535985	20030331
IN 2004KN01433	A	20051230	IN 2004-KN1433	20040927
NO 2004004617	A	20041228	NO 2004-4617	20041026
JP 2006193533	A	20060727	JP 2006-96143	20060330
PRIORITY APPLN. INFO.:			US 2002-369066P P	20020329
			JP 2003-579810 A3	20030331
			WO 2003-US10117 W	20030331

OTHER SOURCE(S): MARPAT 139:307759
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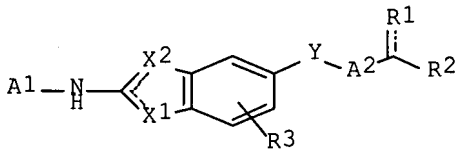

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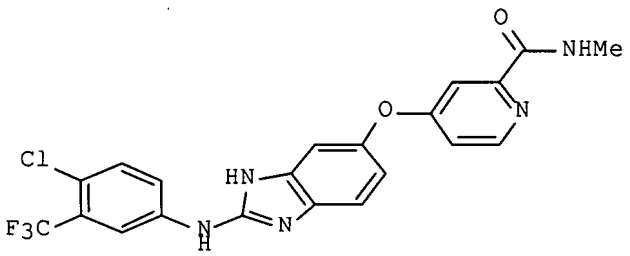


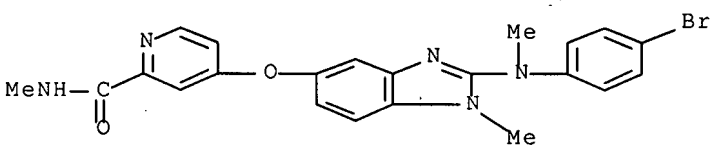
II

AB The title compds. [I; X1, X2 = N, NR4, O, S (with the provisos); Y = O, S; A1 = (un)substituted alkyl, cycloalkyl, aryl, etc.; A2 = (un)substituted heteroaryl; R1 = O, H, and R2 = NR5R6, OH; or CR1R2 = (un)substituted heterocycloalkyl, heteroaryl; R3 = H, halo, alkyl, alkoxy; R4 = H, OH, (di)alkylamino, alkyl; R5, R6 = H, (un)substituted alkyl, alkoxyalkyl, etc.; or R5 and R6 are taken together to form (un)substituted heterocyclyl or heteroaryl], useful for inhibition of Raf kinase activity in a human or animal subject, were prepared E.g., a 3-step synthesis of the benzimidazole II (starting from 4-amino-3-nitrophenol and (4-chloropyridin-2-yl)-N-methylcarboxamide), was given. The compds. of examples 1-1094 showed a Raf kinase inhibitory activity at an IC50 of less than 5 μM. A composition comprising the compound I is claimed. The new compds. compns. may be used either alone or in combination with at least one addnl. agent for the treatment of a Raf kinase mediated disorder, such as cancer.

IT **611215-02-2P 611215-10-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted benzazoles as Raf kinase inhibitors)

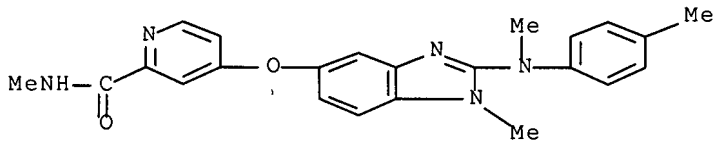
RN 611215-02-2 CAPLUS

CN 2-Pyridinecarboxamide, 4-[[2-[(4-bromophenyl)methylamino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI) (CA INDEX NAME)



RN 611215-10-2 CAPLUS

CN 2-Pyridinecarboxamide, N-methyl-4-[[1-methyl-2-[methyl(4-methylphenyl)amino]-1H-benzimidazol-5-yl]oxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

FILE 'CAOLD' ENTERED AT 10:40:49 ON 15 MAY 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

L6 0 L4

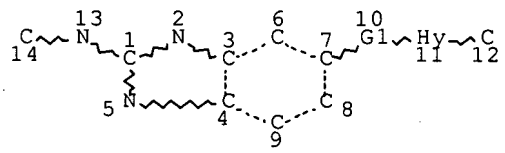
FILE 'MEDLINE' ENTERED AT 10:40:58 ON 15 MAY 2007

FILE 'BIOSIS' ENTERED AT 10:40:58 ON 15 MAY 2007

FILE 'EMBASE' ENTERED AT 10:40:58 ON 15 MAY 2007

L7 0 L4

(FILE 'REGISTRY' ENTERED AT 10:41:55 ON 15 MAY 2007)
L8 STR



VAR G1=O/S
NODE ATTRIBUTES:
NSPEC IS RC AT 12

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NSPEC   IS RC     AT  14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
L9         1369 SEA FILE=REGISTRY SSS FUL L8

100.0% PROCESSED    4998 ITERATIONS                          1369 ANSWERS
SEARCH TIME: 00.00.01

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                E NEOPLASM+ALL/CT
L14      140282 SEA ABB=ON  PLU=ON  NEOPLASM+OLD/CT
                E MELANOMA+ALL/CT
L15       19182 SEA ABB=ON  PLU=ON  MELANOMA+OLD/CT
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                E E2+ALL
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                E E2+ALL
L17       25299 SEA ABB=ON  PLU=ON  "PROSTATE GLAND, NEOPLASM"+OLD/CT
                E LUNG CANCER+ALL/CT
                E E2+ALL
L18       38127 SEA ABB=ON  PLU=ON  "LUNG, NEOPLASM"+OLD/CT
                E THYROID CANCER+ALL/CT
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                E GALLBLADDER CANCER+ALL/CT
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                L18 OR L19 OR L20)
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                E E2+ALL
                E E29+ALL
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                E MYELOID LEUKEMIA+ALL/CT
L23        6144 SEA ABB=ON  PLU=ON  "MYELOID LEUKEMIA"+OLD/CT
                E VILLOUS COLON ADENOMA+ALL/CT
                E COLON ADENOMA+ALL/CT
                E E2+ALL
L24         527 SEA ABB=ON  PLU=ON  "ADENOMA (L) COLONIC"+OLD/CT
                D COST
                E COLON ADENOMA+ALL/CT
                E E3+ALL
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L28             2 S L11 AND THU/RL
L29             2 S L12 OR L27 OR L28

E1 THROUGH E30 ASSIGNED

L29  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2007 ACS on STN
ED   Entered STN:  18 Oct 2004
ACCESSION NUMBER:         2004:857399  CAPLUS  Full-text
DOCUMENT NUMBER:          141:343478
TITLE:                    Use of small molecule compounds for
                          immunopotentiation
INVENTOR(S):              Valiante, Nicholas
PATENT ASSIGNEE(S):       Chiron Corporation, USA
SOURCE:                   PCT Int. Appl., 146 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
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     WO 2004087153         A2    20041014    WO 2004-US10331         20040329
     WO 2004087153         A3    20050317
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             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
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             VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
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             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
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     CA 2520124            A1    20041014    CA 2004-2520124         20040329
     US 2005136065         A1    20050623    US 2004-814480          20040329
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             PL, SK
PRIORITY APPLN. INFO.:                        US 2003-458888P     P  20030328

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OTHER SOURCE(S):          MARPAT 141:343478
GI
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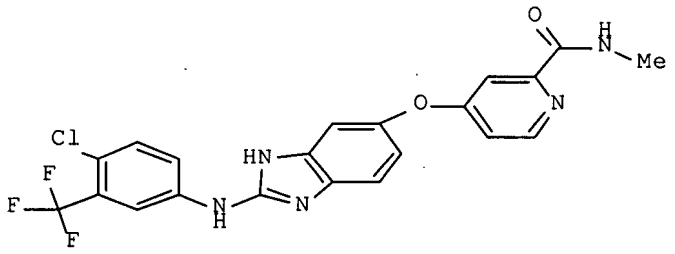

I

AB The invention provides immunostimulatory compns. comprising a small mol. immunopotentiator (SMIP) compound and methods of administration thereof. Also provided are methods of administering a SMIP compound in an effective amount to enhance the immune response of a subject to an antigen. Further provided are compns. and methods of administering SMIP compds. alone or in combination with another agent for the treatment of **cancer**, infectious diseases and/or allergies/asthma. Preparation of selected compds., e.g. I, is included.

IT **611213-07-1 611214-93-8 611215-16-8**
611216-17-2 611223-31-5 774196-96-2
774196-97-3
RL: PAC (Pharmacological activity); **THU (Therapeutic use)**;
BIOL (Biological study); USES (Uses)
(small mol. compds. for immunopotentiation)

IT **611212-56-7P 611213-70-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(small mol. compds. for immunopotentiation)

L29 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
ED Entered STN: 07 Oct 2004
ACCESSION NUMBER: 2004:817883 CAPLUS Full-text
DOCUMENT NUMBER: 141:332190
TITLE: Preparation of fused azoles such as 2,5-disubstituted benzimidazoles, benzoxazoles and benzothiazoles as kinase inhibitors
INVENTOR(S): Dipietro, Lucian V.; Harmange, Jean-Christophe; Askew, Benny C., Jr.; Elbaum, Daniel; Germain, Julie; Habgood, Gregory J.; Kim, Joseph L.; Patel, Vinod F.; Potashman, Michele; Van der Plas, Simon
PATENT ASSIGNEE(S): Amgen Inc., USA
SOURCE: PCT Int. Appl., 289 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004085425	A1	20041007	WO 2004-US8809	20040322

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

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US 2004209892	A1	20041021	US 2004-804915	20040319
AU 2004223827	A1	20041007	AU 2004-223827	20040322
CA 2518909	A1	20041007	CA 2004-2518909	20040322
EP 1638954	A1	20060329	EP 2004-758050	20040322
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
JP 2006520805	T	20060914	JP 2006-507472	20040322

PRIORITY APPLN. INFO.: US 2003-456691P P 20030321

US 2004-804915 A 20040319

WO 2004-US8809 A 20040322

OTHER SOURCE(S): MARPAT 141:332190

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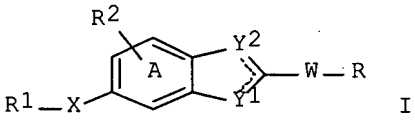

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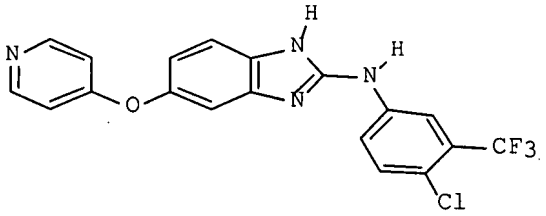

II

AB Title compds. I [W, X, Y1 and Y2 independently = O, S(O)n and NR3; ring A optionally contains a N atom at a non-fused, non-substituted ring position; n = 0-2; R = (un)substituted-aryl, -heterocyclyl, -fused heterocyclyl, etc.; R1 = (un)substituted-aryl, -arylalkyl, -heterocyclyl, etc.; R2 = H, halo, alkoxy, etc.; R3 = H or alkyl] are prepared and disclosed as having kinase inhibitory activity, such as VEGFR/KDR inhibitory activity. Thus, e.g., II was prepared by cyclocondensation of 4-(pyridin-4-yloxy)benzene-1,2-diamine with 1-chloro-4-isothiocyanato-2-trifluoromethylbenzene. In human umbilical vein endothelial cell proliferation assay, selected I inhibited VEGF-stimulated proliferation at a level below 100 nM. Accordingly, I would be useful in the prevention and treatment of angiogenesis related disorders, ophthalmol. conditions, proliferative diseases, inflammatory diseases, and other pathol. conditions as described in the specification.

IT **611212-56-7P 769960-01-2P 769960-02-3P 769960-03-4P 769960-04-5P 769960-05-6P 769960-06-7P 769960-07-8P 769960-08-9P 769960-09-0P 769960-10-3P 769960-11-4P**

769960-12-5P 769960-13-6P 769960-14-7P
769960-15-8P 769960-16-9P 769960-19-2P
769960-20-5P 769960-82-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); **THU (Therapeutic use)**; BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of benzimidazole, benzoxazole and benzothiazole derivs. as kinase inhibitors)

IT **769961-00-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of benzimidazole, benzoxazole and benzothiazole derivs. as kinase inhibitors)

IT **769961-24-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; preparation of benzimidazole, benzoxazole and benzothiazole derivs. as kinase inhibitors)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

FILE 'REGISTRY' ENTERED AT 10:59:08 ON 15 MAY 2007

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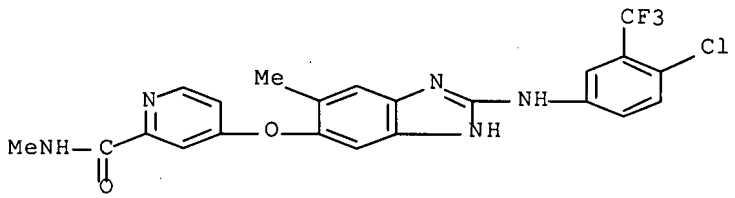
L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, 4-[[2-[[4-chloro-3-(trifluoromethyl)phenyl]amino]-6-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI)
MF C22 H17 Cl F3 N5 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):14

L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, N-methyl-4-[[2-[(1,2,3,4-tetrahydro-4,4-dimethyl-7-isoquinolinyl)amino]-1H-benzimidazol-5-yl]oxy]- (9CI)
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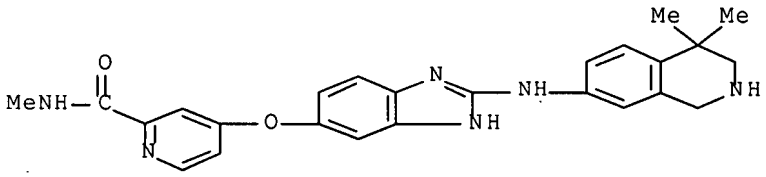
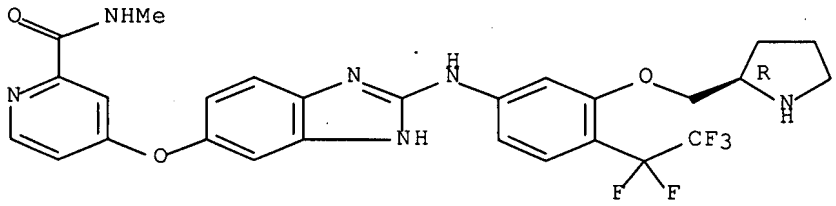


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

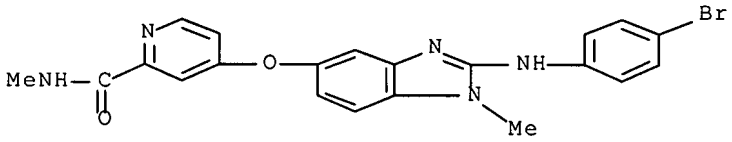
L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, N-methyl-4-[[2-[[4-(pentafluoroethyl)-3-[(2R)-2-pyrrolidinylmethoxy]phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI)
MF C27 H25 F5 N6 O3

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

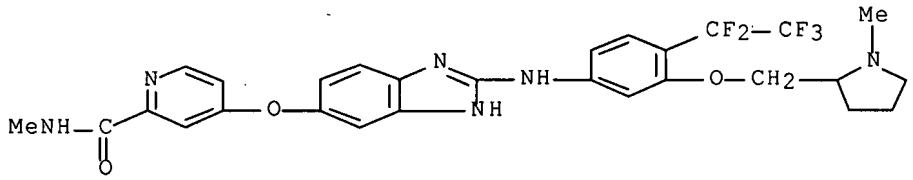
L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, 4-[[2-[(4-bromophenyl)amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI)
MF C21 H18 Br N5 O2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN 2-Pyridinecarboxamide, N-methyl-4-[[2-[[3-[(1-methyl-2-pyrrolidinyl)methoxy]-4-(pentafluoroethyl)phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI)
MF C28 H27 F5 N6 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
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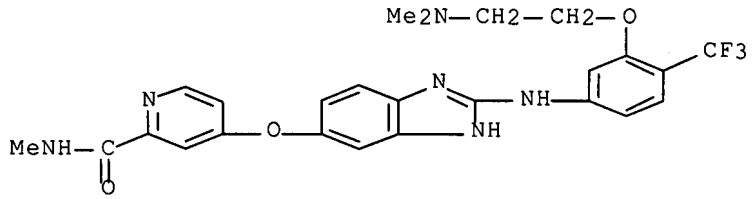
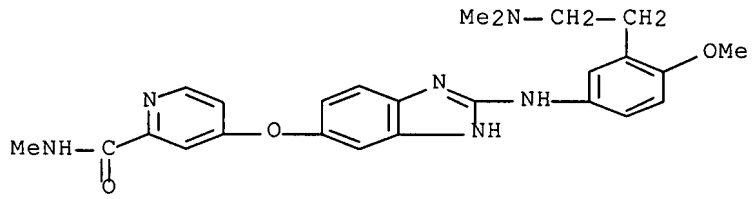


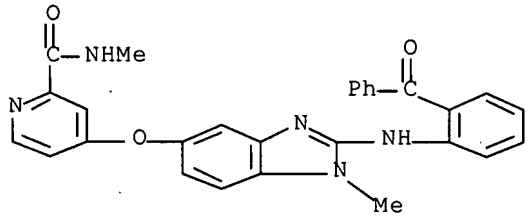
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, 4-[[2-[[3-[2-(dimethylamino)ethyl]-4-methoxyphenyl]amino]-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI)
MF C25 H28 N6 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, 4-[[2-[(2-benzoylphenyl)amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI)
MF C28 H23 N5 O3



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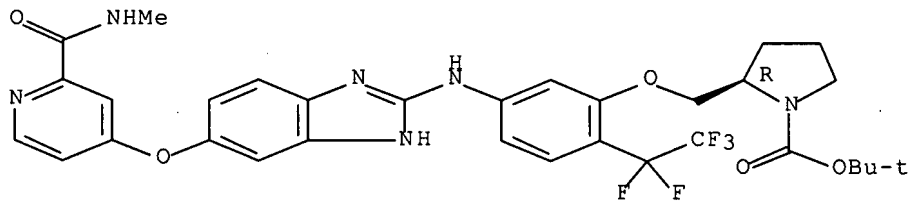
L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1-Pyrrolidinecarboxylic acid, 2-[[5-[[5-[[2-[(methylamino)carbonyl]-4-pyridinyl]oxy]-1H-benzimidazol-2-yl]amino]-2-(pentafluoroethyl)phenoxy]methyl]-, 1,1-dimethylethyl ester, (2R)- (9CI)
MF C32 H33 F5 N6 O5

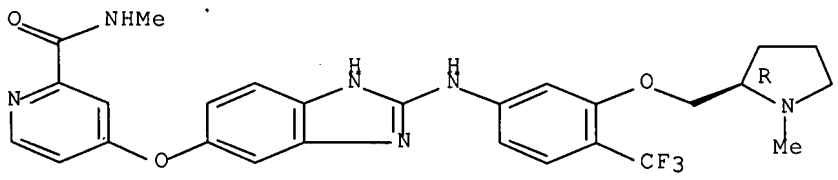
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

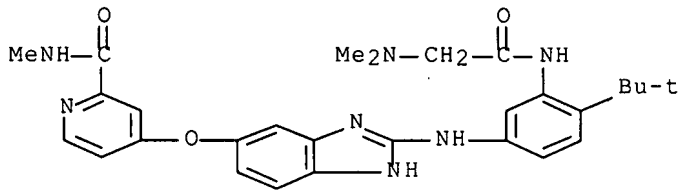
L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, N-methyl-4-[[2-[[3-[[(2R)-1-methyl-2-pyrrolidinyl]methoxy]-4-(trifluoromethyl)phenyl]amino]-1H-benzimidazol-5-yl]oxy]- (9CI)
MF C27 H27 F3 N6 O3

Absolute stereochemistry.



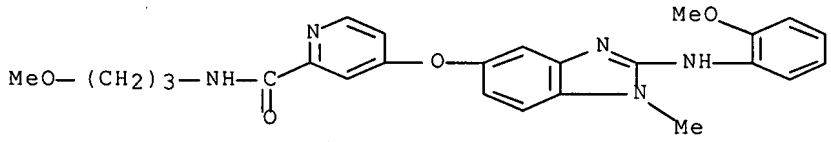
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, 4-[[2-[[3-[[(dimethylamino)acetyl]amino]-4-(1,1-dimethylethyl)phenyl]amino]-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI)
MF C28 H33 N7 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, 4-[[2-[(2-methoxyphenyl)amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-(3-methoxypropyl)- (9CI)
MF C25 H27 N5 O4



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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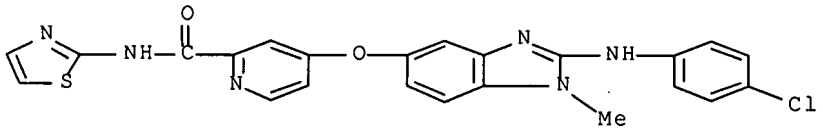
IN 2-Pyridinecarboxamide, 4-[[2-[(4-chlorophenyl)amino]-1-methyl-1H-benzimidazol-5-yl]oxy]-N-2-thiazolyl- (9CI)
MF C23 H17 Cl N6 O2 S



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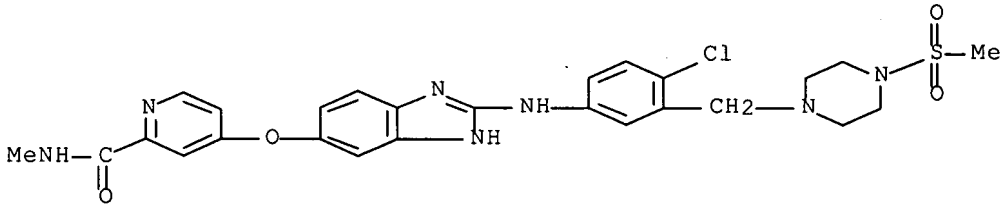
L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2-Pyridinecarboxamide, 4-[[2-[[4-chloro-3-[[4-(methylsulfonyl)-1-piperazinyl]methyl]phenyl]amino]-1H-benzimidazol-5-yl]oxy]-N-methyl- (9CI)
MF C26 H28 Cl N7 O4 S



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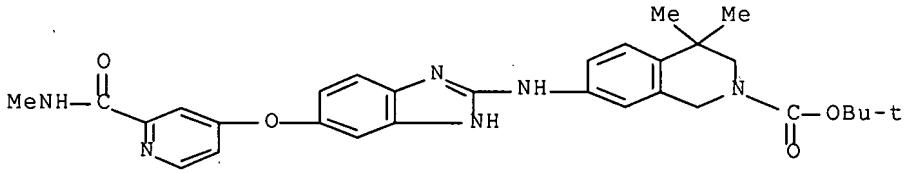
L30 30 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2(1H)-Isoquinolinecarboxylic acid, 3,4-dihydro-4,4-dimethyl-7-[[5-[[2-[(methylamino)carbonyl]-4-pyridinyl]oxy]-1H-benzimidazol-2-yl]amino]-, 1,1-dimethylethyl ester (9CI)
MF C30 H34 N6 O4



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               HASKELL B"? OR "LEVINE B"? OR "HASKELL B"?)/AU
L36          268 SEA ABB=ON  PLU=ON  "POON D"?/AU
L37           57 SEA ABB=ON  PLU=ON  ("RAMURTHY S"? OR "SAVITHRI R"?)/AU
L38         3979 SEA ABB=ON  PLU=ON  ("SUBRAMANIAN S"? OR "SHARADHA S"?)/AU
L39          884 SEA ABB=ON  PLU=ON  "SUNG L"?/AU
L40          110 SEA ABB=ON  PLU=ON  "RENHOWE P"?/AU
L41            8 SEA ABB=ON  PLU=ON  L33 AND ((L34 OR L35 OR L36 OR L37 OR
               L38 OR L39 OR L40))
L42            6 SEA ABB=ON  PLU=ON  L34 AND ((L35 OR L36 OR L37 OR L38 OR
               L39 OR L40))
L43           13 SEA ABB=ON  PLU=ON  L35 AND ((L36 OR L37 OR L38 OR L39 OR
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L44           16 SEA ABB=ON  PLU=ON  L36 AND ((L37 OR L38 OR L39 OR L40))
L45           29 SEA ABB=ON  PLU=ON  L37 AND ((L38 OR L39 OR L40))
L46           19 SEA ABB=ON  PLU=ON  L38 AND (L39 OR L40)
L47            6 SEA ABB=ON  PLU=ON  L39 AND L40
L48            6 SEA ABB=ON  PLU=ON  L33 AND L34 AND L35 AND L36 AND L37
               AND L38 AND L39 AND L40
L49           11 S (L43-L46) AND (L13-L20 OR L22-L25)
L50           30 SEA ABB=ON  PLU=ON  ((L43 OR L44 OR L45 OR L46)) AND
               (?CANCER? OR ?CARCIN? OR ?TUMOUR? OR ?TUMOR? OR ?NEOPLAS?
               OR ?MELANOMA? OR ?LEUKEM? OR ?LEUKAEM? OR ADENOMA(3A)
               COLON##)
L51           26 SEA ABB=ON  PLU=ON  L50 AND (TREAT? OR THERAP? OR PREVENT?)
L52           27 SEA ABB=ON  PLU=ON  L41 OR L42 OR L47 OR L48 OR L49 OR L51
L53           20 DUP REM L52 (7 DUPLICATES REMOVED)

L53  ANSWER 1 OF 20  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:        2007:175383  CAPLUS  Full-text
DOCUMENT NUMBER:         146:251846
TITLE:                   Substituted imidazole compounds as KSP inhibitors
                         and their preparation, pharmaceutical compositions
                         and use in the treatment of
                         cancers
INVENTOR(S):             Barsanti, Paul A.; Xia, Yi; Wang, Weibo;
                         Mendenhall, Kris G.; Lagniton, Liana M.;
                         Ramurthy, Savithri; Phillips, Megan C.;
                         Subramanian, Sharadha; Boyce, Rustum;
                         Brammeier, Nathan M.; Constantine, Ryan; Duhl,
                         David; Walter, Annette O.; Abrams, Tinya J.;
                         Renhowe, Paul A.
PATENT ASSIGNEE(S):      Novartis Vaccines and Diagnostics Inc., USA
SOURCE:                  U.S. Pat. Appl. Publ., 101pp.
                         CODEN: USXXCO
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.          DATE
     ----------------    ----   --------    --------------------     --------
     US 2007037853        A1    20070215    US 2006-502303           20060809
     WO 2007021794        A1    20070222    WO 2006-US31129          20060809
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             GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA,
             MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-706901P P 20050809

OTHER SOURCE(S): MARPAT 146:251846

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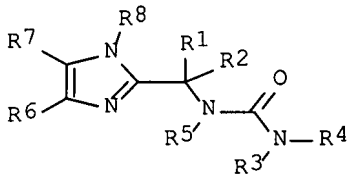

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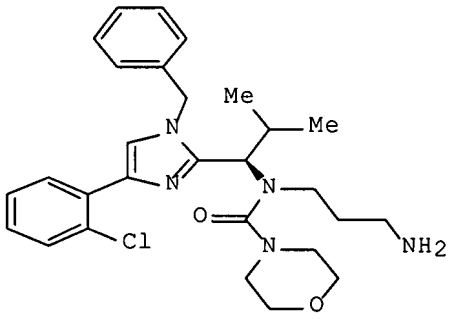


II

AB The invention relates to substituted imidazole compds. of formula I and pharmaceutically acceptable salts, esters or prodrugs thereof, compns. of the derivs. together with pharmaceutically acceptable carriers, and uses of the compds. Compds. of formula I wherein R1 is aminoacyl, acylamino, carboxyl, carboxyl esters, and (un)substituted alkyl with the proviso that substituted alkyl is not substituted with aryl; R2 is H, alkyl and aryl; R3 and R5 are independently H, OH, (un)substituted alkyl, (un)substituted cycloalkyl, (un)substituted (hetero)aryl, etc.; R5 is H, (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkynyl, etc.; one of R6 and R7 is (un)substituted cycloalkyl, (un)substituted heterocyclyl, and (un)substituted (hetero)aryl and the other one of R6 and R7 is H, halo, and alkyl; R8 is L-A; L is SO, SO2 and (un)substituted C1-5 alkylene; A is (un)substituted (hetero)aryl, (un)substituted heterocyclic, and (un)substituted cycloalkyl; and their pharmaceutically acceptable salts, esters and prodrugs thereof, are claimed. Example compound II was prepared by a general procedure (procedure given). All the invention compds. were evaluated for their KSP inhibitory activity.

L53 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2006:13616 CAPLUS Full-text

DOCUMENT NUMBER: 144:108320

TITLE: Preparation of N-(1-(1-benzyl-4-phenyl-1H-imidazol-2-yl)-2,2-dimethylpropyl) benzamide derivatives and related compounds as kinesin spindle protein (ksp) inhibitors for the **treatment** of **cancer**

INVENTOR(S): Wang, Weibo; Barsanti, Paul A.; Xi, Yi; Boyce, Rustum S.; Pecchi, Sabina; Brammeier, Nathan; Phillips, Megan; Mendenhall, Kris; Wayman, Kelly; Lagniton, Liana Marie; Constantine, Ryan; Yang, Hong; Mieuli, Elizabeth; **Ramurthy**, **Savithri**; Jazan, Elisa; Sharma, Anu; Rama,

Jain; Sabramanian, Sharadha; **Renhowe, Paul**
; Bair, Kenneth Walter; Duhl, David; Walter,
Annette; Abrams, Tinya; Huh, Kay; Martin, Eric;
Knapp, Mark; Le, Vincent

PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 294 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006002236	A1	20060105	WO 2005-US22062	20050620
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005258135	A1	20060105	AU 2005-258135	20050620
CA 2571002	A1	20060105	CA 2005-2571002	20050620
US 2006009472	A1	20060112	US 2005-158574	20050620
EP 1765789	A1	20070328	EP 2005-760871	20050620
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
NO 2007000343	A	20070305	NO 2007-343	20070118

PRIORITY APPLN. INFO.: US 2004-580927P P 20040618
WO 2005-US22062 W 20050620

OTHER SOURCE(S): MARPAT 144:108320
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = aminoacetyl, acylamino, carboxyl, etc.; R2 = H, alkyl, aryl; R3 = H, CO-A, CS-A, SO-A, SO2-A, SO2NR, where R = H or alkyl; A = H, (un)substituted alkyl, alkoxy, aryl, etc.; or R1 and R3 together form a heterocycle or substituted heterocycle; R4 = H, alkyleneaminoacyl, alkyleneoxyacyl, alkylenehydroxy, etc.; R5 = S(O)q-A1 or (un)substituted alkylene-A1, where A1 = (un)substituted aryl, heteroaryl, heterocyclic, etc., and q = 1-2; one of R6 or R7 = (un)substituted heterocyclic, aryl or heteroaryl; the other of R6 or R7 = H, halo or alkyl; or R6 and R7 both = H], and their pharmaceutically acceptable salts, are prepared and disclosed as compds. which modulate the activity of kinesin spindle protein (KSP) and are useful for the **treatment** of **cancer**. Thus, e.g., II was prepared by conversion of N-Boc-3-formylpyrrolidine to the TMS-enol ether followed by oxidation to the N-Boc-3-formyl-3- hydroxypyrrolidine which underwent reductive amination with III followed by spirocyclization with chloroacetyl chloride and

deprotection. Assays for determining activity are described (no data). **Therapeutic** use of I with addnl. agents useful for the **treatment** of **cancer** is claimed.

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 3 OF 20 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2006:650228 BIOSIS Full-text
DOCUMENT NUMBER: PREV200600661578
TITLE: Substituted benz-azoles and methods of their use as inhibitors of Raf kinase.
AUTHOR(S): Anonymous; **Renhowe, Paul A.** [Inventor]; **Ramurthy, Savithri** [Inventor]; **Amiri, Payman** [Inventor]; **Levine, Barry Haskell** [Inventor]; **Poon, Daniel J.** [Inventor]; **Subramanian, Sharadha** [Inventor]; **Sung, Leonard** [Inventor]; **Fantl, Wendy** [Inventor]; Hansen, Teresa [Inventor]; McBride, Christopher [Inventor]; Shafer, Cynthia M. [Inventor]
CORPORATE SOURCE: Danville, CA USA
ASSIGNEE: Chiron Corporation
PATENT INFORMATION: US 07071216 20060704
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (JUL 4 2006)
CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Nov 2006
Last Updated on STN: 29 Nov 2006

AB New substituted benz-azole compounds, compositions and methods of inhibition of Raf kinase activity in a human or animal subject are provided. The new compounds compositions may be used either alone or in combination with at least one additional agent for the **treatment** of a Raf kinase mediated disorder, such as **cancer**.

L53 ANSWER 4 OF 20 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2006:552501 BIOSIS Full-text
DOCUMENT NUMBER: PREV200600565400
TITLE: Inhibitors of glycogen synthase kinase 3.
AUTHOR(S): Anonymous; Nuss, John M. [Inventor]; Harrison, Stephen D. [Inventor]; Ring, David B. [Inventor]; Boyce, Rustum S. [Inventor]; Johnson, Kirk [Inventor]; Pfister, Keith B. [Inventor]; **Ramurthy, Savithri** [Inventor]; Seely, Lynn [Inventor]; Wagman, Allan S. [Inventor]; Desai, Manoj C. [Inventor]; **Levine, Barry H.** [Inventor]
CORPORATE SOURCE: Danville, CA USA
ASSIGNEE: Chiron Corporation
PATENT INFORMATION: US 07045519 20060516
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (MAY 16 2006)
CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 27 Oct 2006
Last Updated on STN: 27 Oct 2006

AB New pyrimidine or pyridine based compounds, compositions and methods of inhibiting the activity of glycogen synthase kinase (GSK3) in vitro and of **treatment** of GSK3 mediated disorders in vivo are provided. The methods, compounds and compositions of the invention may be employed alone, or in combination with other pharmacologically active agents in the **treatment** of disorders mediated by GSK3 activity, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency or **cancer**.

L53 ANSWER 5 OF 20 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2006:537603 BIOSIS Full-text
DOCUMENT NUMBER: PREV200600547125
TITLE: Inhibitors of glycogen synthase kinase 3.
AUTHOR(S): Anonymous; Nuss, John M. [Inventor]; Harrison, Stephen D. [Inventor]; Ring, David B. [Inventor]; Boyce, Rustum S. [Inventor]; Brown, Sean P. [Inventor]; Goff, Dane A. [Inventor]; Johnson, Kirk W. [Inventor]; Pfister, Keith B. [Inventor]; **Ramurthy, Savithri** [Inventor]; **Renhowe, Paul A.** [Inventor]; Seely, Lynn [Inventor]; **Subramanian, Sharadha** [Inventor]; Wagman, Allan S. [Inventor]; Zhou, Xiaohui A. [Inventor]
CORPORATE SOURCE: Danville, CA USA
ASSIGNEE: Chiron Corporation
PATENT INFORMATION: US 07037918 20060502
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (MAY 2 2006)
CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 18 Oct 2006
Last Updated on STN: 18 Oct 2006

AB New pyrimidine or pyridine based compounds, compositions and methods of inhibiting the activity of glycogen synthase kinase (GSK3) in vitro and of **treatment** of GSK3 mediated disorders in vivo are provided. The methods, compounds and compositions of the invention may be employed alone, or in combination with other pharmacologically active agents in the **treatment** of disorders mediated by GSK3 activity, such as in the **treatment** of diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency or **cancer**.

L53 ANSWER 6 OF 20 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

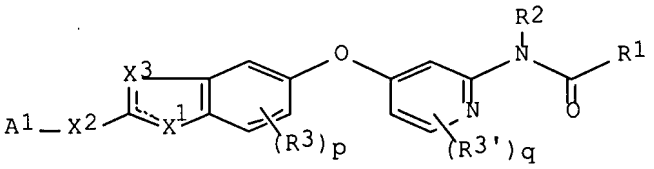
ACCESSION NUMBER: 2006:588217 BIOSIS Full-text
DOCUMENT NUMBER: PREV200600598843
TITLE: CHIR-265 is a potent selective inhibitor of c-Raf/B-Raf/B-mut-Raf that effectively inhibits proliferation and survival of **cancer** cell lines with Ras/Raf pathway mutations.
AUTHOR(S): **Amiri, Payman** [Reprint Author]; Aikawa, Mina E.; Dove, Jeff; Stuart, Darrin D.; **Poon, Daniel**; Pick, Teresa; **Ramurthy, Savithri**; **Subramanian, Sharadha**; **Levine, Barry**;

Costales, Abran; Harris, Alex; Paul, Renhow
CORPORATE SOURCE: Chiron Corp, Emeryville, CA 94608 USA
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (APR 2006) Vol. 47, pp. 1140. Meeting Info.: 97th Annual Meeting of the American-Association-for-Cancer-Research (AACR). Washington, DC, USA. April 01 -05, 2006. Amer Assoc Canc Res.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 8 Nov 2006
Last Updated on STN: 8 Nov 2006

L53 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2005:369277 CAPLUS Full-text
DOCUMENT NUMBER: 142:430271
TITLE: Preparation of substituted benzazoles as inhibitors of raf kinase
INVENTOR(S): **Ramurthy, Savithri; Subramanian, Sharadha**; Verhagen, Joelle; **Poon, Daniel J.**; Hansen, Teresa; Shafer, Cynthia; Mcbride, Christopher; **Levine, Barry H.**; Costales, Abran; **Renhowe, Paul A.**
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 185 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2005037273	A1	20050428	WO 2004-US34179		20041015
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
AU 2004281151	A1	20050428	AU 2004-281151		20041015
CA 2542653	A1	20050428	CA 2004-2542653		20041015
US 2005192287	A1	20050901	US 2004-967089		20041015
EP 1682126	A1	20060726	EP 2004-795357		20041015
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK					
CN 1889951	A	20070103	CN 2004-80036199		20041015
JP 2007509058	T	20070412	JP 2006-535367		20041015
IN 2006KN01221	A	20070427	IN 2006-KN1221		20060510
PRIORITY APPLN. INFO.:			US 2003-511966P	P	20031016
			WO 2004-US34179	W	20041015

OTHER SOURCE(S): MARPAT 142:430271
GI



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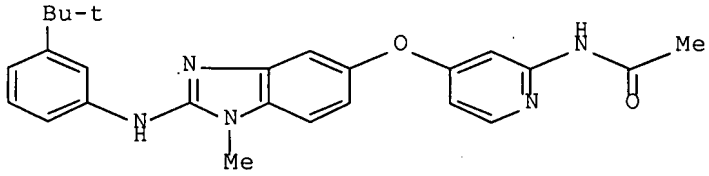


II

AB Title compds. I [X1, X3 = amino, O, S and at least one of X1 and X3 be N; X2 = NH, alkyl; A1 = alkyl, cycloalkyl, heterocycloalkyl, aryl, etc.; R1 = H, alkyl, alkoxyalkyl, etc.; R2 = H, alkyl; R3-3' = H, halo, OH, etc.; p, q = 0-3] are prepared For instance, N-[4-[[2-[[4-chloro-3-(3-fluoropyridin-4-yl)phenyl]amino]-1-methyl-1H- benzimidazol-5-yl]oxy]pyridin-2-yl]acetamide (II) is prepared in 8 steps from 4-[(4-(methylamino)-3-nitrophenyl)oxy]pyridine-2-carboxylic acid and 3-tert-butylisothiocyanate. Compds. of the invention have a raf kinase inhibitory activity at an IC50 < 10 μM and are useful in the **treatment** of alone or in combination with at least one addnl. agent for the **treatment** of a raf kinase mediated disorder, such as **cancer**.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

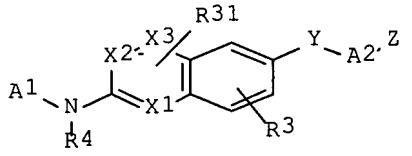
L53 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2005:349005 CAPLUS Full-text
DOCUMENT NUMBER: 142:411374
TITLE: Preparation of 2,6-disubstituted quinazolines, quinoxalines, quinolines and isoquinolines and their use as inhibitors of Raf kinase
INVENTOR(S): **Ramurthy, Savithri; Renhowe, Paul A.; Subramanian, Sharadha**
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005085482	A1	20050421	US 2004-966358	20041015

AU 2004281154	A1	20050428	AU 2004-281154		20041015
CA 2542329	A1	20050428	CA 2004-2542329		20041015
WO 2005037285	A1	20050428	WO 2004-US34185		20041015
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP 1680122	A1	20060719	EP 2004-795363		20041015
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK					
CN 1882345	A	20061220	CN 2004-80030549		20041015
JP 2007509059	T	20070412	JP 2006-535368		20041015
IN 2006KN01069	A	20070420	IN 2006-KN1069		20060425
PRIORITY APPLN. INFO.:			US 2003-511851P	P	20031016
			WO 2004-US34185	W	20041015

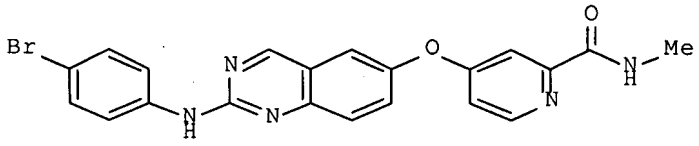
OTHER SOURCE(S): MARPAT 142:411374

GI



I

II



III

AB The title compds. I [X1, X2 = N, CH, provided that at least one of X1 and X2 = N; Y = O, S, CH2, etc.; Z = II, NR6R7, NR5C(:O)R8, NR5C(:S)R8, NR5AA (wherein AA = (un)substituted amino acid); A1 = (un)substituted alkyl, cycloalkyl, heterocycloalkyl, aryl, etc.; A2 = (un)substituted (hetero)aryl; R1 = O or H, and R2 = NR6R7; or R1 is taken together with R2 to form (un)substituted heterocycloalkyl or heteroaryl group; R3 = R31 = H, halo, alkyl, or alkoxy; R4 = H, OH, (un)substituted alkyl; R5 = H, (un)substituted alkyl, alkoxyalkyl, etc.; R6, R7 = H, (un)substituted alkyl, alkoxy, alkoxyalkyl, etc.; or R6 and R7 are taken together to form (un)substituted heterocyclyl or heteroaryl; and R8 = (un)substituted alkyl, alkenyl, alkynyl, alkoxy, etc.; X3 is not defined], useful for inhibition of Raf kinase activity in a human or animal, were prepared E.g., a multi-step synthesis of III, starting from 5-hydroxy-2-nitrobenzaldehyde, was given. The exemplified compds. I were shown to have a

raf kinase inhibitory activity at an IC50 of less than 5 μM. The new compds. I may be used either alone or in combination with at least one addnl. agent for the **treatment** of a Raf kinase mediated disorder, such as **cancer**. The pharmaceutical compns. comprising the compound I are disclosed.

L53 ANSWER 9 OF 20 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 2005-296040 [30] WPIX
CROSS REFERENCE: 2003-833520
DOC. NO. CPI: C2005-091531 [30]
TITLE: New substituted benzazole compounds are Raf kinase inhibitors useful for the **treatment** of hormone dependent **cancer** disorder e.g. breast **cancer** or prostate **cancer**
DERWENT CLASS: B02
INVENTOR: **AMIRI P; FANTL W; LEVINE B H; POON D J; RAMURTHY S; RENHOWE P A; SUBRAMANIAN S; SUNG L; AMIRI P C C; FANTL W C C; LEVINE B H C C; POON D J C C; RAMURTHY S C C; RENHOWE P A C C; SUBRAMANIAN S C C; SUNG L C C**
PATENT ASSIGNEE: (CHIR-C) CHIRON CORP
COUNTRY COUNT: 107

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2005032548	A1	20050414	(200530)*	EN	326[0]	
EP 1675584	A1	20060705	(200644)	EN		
BR 2004014908	A	20061107	(200674)	PT		
AU 2004277405	A1	20050414	(200677)	EN		
MX 2006003435	A1	20060701	(200677)	ES		
KR 2006089232	A	20060808	(200705)	KO		
JP 2007507428	W	20070329	(200725)	JA	308	

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2005032548	A1	WO 2004-US32161	20040929
AU 2004277405	A1	AU 2004-277405	20040929
BR 2004014908	A	BR 2004-14908	20040929
EP 1675584	A1	EP 2004-789345	20040929
EP 1675584	A1	WO 2004-US32161	20040929
BR 2004014908	A	WO 2004-US32161	20040929
MX 2006003435	A1	WO 2004-US32161	20040929
KR 2006089232	A	WO 2004-US32161	20040929
MX 2006003435	A1	MX 2006-3435	20060327
KR 2006089232	A	KR 2006-706470	20060403
JP 2007507428	W	WO 2004-US32161	20040929
JP 2007507428	W	JP 2006-528331	20040929

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
EP 1675584	A1	Based on	WO 2005032548	A

BR 2004014908	A	Based on	WO 2005032548	A
AU 2004277405	A1	Based on	WO 2005032548	A
MX 2006003435	A1	Based on	WO 2005032548	A
KR 2006089232	A	Based on	WO 2005032548	A
JP 2007507428	W	Based on	WO 2005032548	A

PRIORITY APPLN. INFO: US 2003-675927 20030929
AN 2005-296040 [30] WPIX
CR 2003-833520
AB WO 2005032548 A1 UPAB: 20051222
NOVELTY - Substituted benzazole compounds (I) and their salts, esters or prodrugs are new.
DETAILED DESCRIPTION - Substituted benzazole compounds of formula (I) and their salts, esters or prodrugs are new. X1, X2 = N, NR4, O or S (provided that if X1 is -NR4-, O or S, then X2 is -NR4, O or S then X2 is N, and both X1 and X2 are not N); Y = O or S;
A1 = optionally substituted alkyl, (hetero)cycloalkyl, polycyclic aryl, polycyclic arylalkyl, (hetero)aryl, biaryl, heteroarylaryl, heteroarylheteroaryl, (hetero)cycloalkylalkyl, (hetero)arylalkyl, biarylalkyl or heteroarylarylalkyl; A2 = optionally substituted heteroaryl; either R1 = O or H; and
R2 = NR5R6 or OH; or
R1+R2 = optionally substituted with heterocycloalkyl or heteroaryl;
dashed line = single or double bond; R3 = H, halo, lower alkyl or lower alkoxy; R4 = H, OH, (di)alkylamino or alkyl; either R5, R6 = H or optionally substituted alkyl, alkoxyalkyl, aminoalkyl, amidoalkyl, acyl, (hetero)cycloalkyl, (hetero)aryl, alkyloxyalkylheterocyclo or heteroarylalkyl; or NR5R6 = optionally substituted heterocyclo or heteroaryl; and R7 = H or lower alkyl.
An INDEPENDENT CLAIM is also included for the composition comprising (I).
ACTIVITY - Cytostatic.
MECHANISM OF ACTION - Raf serine/threonine kinase inhibitor. (I) were tested for Raf serine/threonine kinase inhibitory activity in biotinylated Raf screen assay. The median inhibitory concentration of 4-((2-((4-chloro-3-trifluoromethyphenyl)amino)-1H-benzimidazol-6- yl)oxy)-N-methylpyridine-2-carboxamide (Ia) was less than 5 microM.
USE - (I) are useful for the **treatment** of hormone dependent **cancer** disorder e.g. breast **cancer** or prostate **cancer** (claimed).
ADVANTAGE - (I) has great efficacy in inhibiting **tumor** cell proliferation.

L53 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 2004:182868 CAPLUS Full-text
DOCUMENT NUMBER: 140:235595
TITLE: Preparation of pyrrole based selective inhibitors of glycogen synthase kinase 3 for **treating** diabetes and other disorders
INVENTOR(S): Desai, Manoj; Ni, Zhi-Jie; Ng, Simon; Pfister, Keith B.; **Ramurthy, Savithri**; **Subramanian, Sharadha**; Wagman, Allan S.
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2004018455	A1	20040304	WO 2003-US26625		20030821
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2496246	A1	20040304	CA 2003-2496246		20030821
AU 2003268184	A1	20040311	AU 2003-268184		20030821
US 2004077707	A1	20040422	US 2003-646625		20030821
EP 1537099	A1	20050608	EP 2003-749133		20030821
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
CN 1688573	A	20051026	CN 2003-824335		20030821
JP 2006501243	T	20060112	JP 2004-531200		20030821
IN 2005KN00471	A	20060203	IN 2005-KN471		20050321
PRIORITY APPLN. INFO.:			US 2002-405846P	P	20020823
			WO 2003-US26625	W	20030821

OTHER SOURCE(S): MARPAT 140:235595

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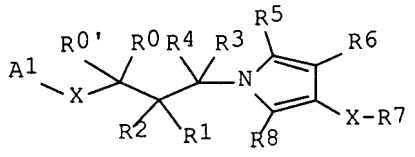

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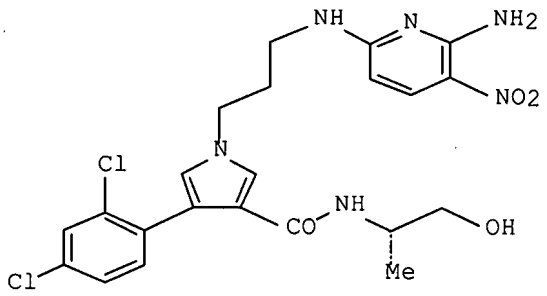

II

AB New pyrrole based compds. (shown as I; variables defined below; e.g. II), compns. and methods of inhibiting the activity of glycogen synthase kinase (GSK3) in vitro and of **treatment** of GSK3 mediated disorders in vivo are provided. The methods, compds. and compns. of the invention may be employed alone, or in combination with other pharmacol. active agents in the **treatment** of disorders mediated by GSK3 activity, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X,

ischemia, traumatic brain injury, bipolar disorder, immunodeficiency or **cancer**. For I: X is N, O, or (un)substituted C; W is absent or -O-, -S-, -S(O)-, -SO2-, -NH-, -NH-CO-, -NR'CO-, -NHSO2-, -NR'SO2-, -CO-, -CO2-, -CH2-, -CF2-, -CHF-, -CONH-, -CONR'-, and -NR'-, where R' is (un)substituted alkyl, cycloalkyl, aryl, heteroaryl, heterocyclo; A1 is (un)substituted aryl or heteroaryl; R0 and R0' = H and Me. R1, R2, R3, and R4 = H, hydroxy, and (un)substituted loweralkyl, cycloloweralkyl, cyclicaminoalkyl, alkylaminoalkyl, loweralkoxy, amino, alkylamino, alkylcarbonyl, arylcarbonyl, aralkylcarbonyl, heteroarylcarbonyl, heteroaralkylcarbonyl, aryl and heteroaryl. R5 and R8 = H, halo, and (un)substituted loweralkyl, cycloalkyl, alkoxy, amino, aminoalkoxy, carbonyloxy, aminocarbonyloxy, alkylcarbonylamino, arylcarbonylamino, aralkylcarbonylamino, heteroarylcarbonylamino, heteroaralkylcarbonylamino, cycloimido, heterocycloimido, amidino, cycloamidino, heterocycloamidino, guanidinyl, aryl, biaryl, heteroaryl, heteroarylaryl, heteroarylheteroaryl, heterocycloalkyl, heterocyclocarbonyloxy, heteroarylcarbonyloxy, and arylsulfonamido. R6 = H, and (un)substituted aryl, heteroaryl, and heterocyclo; R7 = H, hydroxy, halo, carboxy, nitro, amino, amido, amidino, imido, cyano, sulfonyl, methanesulfonyl, and (un)substituted alkyl, alkoxy, alkylcarbonyl, arylcarbonyl, aralkylcarbonyl, heteroarylcarbonyl, heteroaralkylcarbonyl, alkylcarbonyloxy, arylcarbonyloxy, aralkylcarbonyloxy, etc.; addnl. details are given in the claims. Although the methods of preparation are not claimed, example prepns. and characterization data are included for hundreds of I. For example, II was prepared in 7 steps starting with esterification of (E)-3-(2,4-dichlorophenyl)-2-propenoic acid with tBuOH, followed by cyclization with p-tolylSO2CH2NC to give 4-(2,4-dichlorophenyl)pyrrole- 3-carboxylic acid tert-Bu ester, followed by N-alkylation with 3-bromopropylphthalimide, followed by conversion of the phthalimide to the diamine with hydrazine, followed by N-substitution with (6-chloro-3-nitro-2-pyridyl)amine to give 1-[3-[(6-amino-5-nitropyridin-2-yl)amino]propyl]-4-(2,4-dichlorophenyl)pyrrole-3- carboxylic acid tert-Bu ester, followed by acid hydrolysis and carboxamide formation with (2S)-(+)-2-aminopropan-1-ol to give II. Representative I have GSK3 inhibitory activity <10 μM (specific compds. not mentioned); they exhibit a selectivity of ≥2-fold for GSK3 as compared to another kinase and more typically they exhibit a selectivity of ≥5-fold. Compds. I were shown to be capable of significantly reducing the potential of glutamate to induce neuronal cell death. In the glucose tolerance test, representative I exhibited good in vitro potency, and when formulated in captisol and administered s.c. to mice (30 mg/kg), exhibited high bioavailability and tissue penetrance in vivo. A significant reduction in basal hyperglycemia just prior to the glucose tolerance test, and significantly improved glucose disposal following glucose challenge were observed, comparable to the efficacy obtained with Troglitazone. Also of significance was the observation that insulin levels in **treated** animals remained lower than in control mice.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 5

ACCESSION NUMBER: 2004:182836 CAPLUS Full-text

DOCUMENT NUMBER: 140:235711

TITLE: Preparation of benzimidazole quinolinones for inhibiting a serine/threonine kinase

INVENTOR(S): Barsanti, Paul A.; Bussiere, Dirksen; Harrison, Stephen D.; Heise, Carla C.; Jansen, Johanna M.; Jazan, Elisa; Machajewski, Timothy D.; Mcbride, Christopher; McCrea, William R.; Ng, Simon; Ni, Zhi-Jie; Pecchi, Sabina; Pfister, Keith; **Ramurthy, Savithri; Renhowe, Paul**

A.; Shafer, Cynthia M.; Silver, Joel B.; Wagman, Allan; Weismann, Marion

PATENT ASSIGNEE(S): Chiron Corporation, USA

SOURCE: PCT Int. Appl., 570 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004018419	A2	20040304	WO 2003-US25990	20030819
WO 2004018419	A3	20040603		
WO 2004018419	B1	20040729		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2496164	A1	20040304	CA 2003-2496164	20030819
AU 2003288899	A1	20040311	AU 2003-288899	20030819
EP 1539754	A2	20050615	EP 2003-781286	20030819
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003013743	A	20050705	BR 2003-13743	20030819
CN 1692112	A	20051102	CN 2003-824565	20030819
JP 2006503919	T	20060202	JP 2005-501762	20030819
IN 2005KN00484	A	20060106	IN 2005-KN484	20050323

PRIORITY APPLN. INFO.:		
US 2002-405729P	P	20020823
US 2002-426107P	P	20021113
US 2002-426226P	P	20021113
US 2002-426282P	P	20021113
US 2002-428210P	P	20021121
US 2003-460327P	P	20030403
US 2003-460328P	P	20030403
US 2003-460493P	P	20030403
US 2003-478916P	P	20030616
US 2003-484048P	P	20030701
WO 2003-US25990	W	20030819

OTHER SOURCE(S): MARPAT 140:235711

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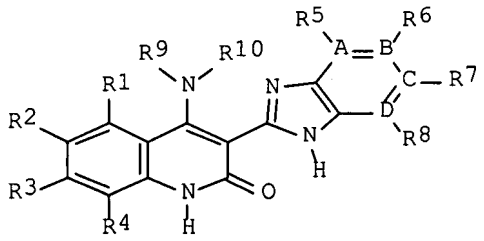

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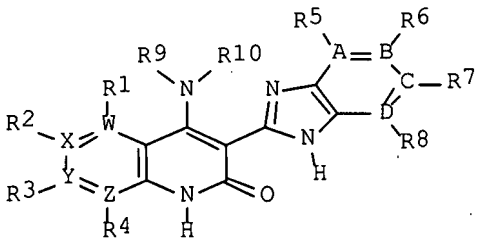

II

AB The title compds. [I and II; A, B, C, and D = C, N; W, X, Y and Z = C, N and at least one of W, X, Y, and Z = N; R1-R8 = H, halo, CN, NO2, etc.; R9 = H, (un)substituted alkyl, aryl, etc.; R10 = H; or NR9R10 = 5-7 membered ring], useful for inhibiting various enzymes and **treating** various conditions, were prepared E.g., a multi-step synthesis of 4-amino-3-(benzimidazol-2-yl)-6-(4-methylpiperazinyl)hydroquinolin-2-one, was given. The majority of the exemplary compds. I displayed an IC50 of less than 10 μM with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1ε, Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFRα, and PDGFRβ. In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFRα, and PDGFRβ with IC50 values of less than 1 μM.

L53 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:	2004:513393 CAPLUS Full-text
DOCUMENT NUMBER:	141:71544
TITLE:	Preparation of substituted benzazoles as Raf kinase inhibitors
INVENTOR(S):	**Amiri, Payman; Fantl, Wendy; Levine, Barry Haskell; Poon, Daniel J.; Ramurthy, Savithri; Renhowe, Paul A.; Subramanian, Sharadha; Sung, Leonard**
PATENT ASSIGNEE(S):	USA
SOURCE:	U.S. Pat. Appl. Publ., 476 pp., Cont.-in-part of U.S. Pat. Appl. 2004 87,626. CODEN: USXXCO
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004122237	A1	20040624	US 2003-675927	20030929
US 2004087626	A1	20040506	US 2003-405945	20030331
US 7071216	B2	20060704		
AU 2004277405	A1	20050414	AU 2004-277405	20040929
CA 2539748	A1	20050414	CA 2004-2539748	20040929
WO 2005032548	A1	20050414	WO 2004-US32161	20040929
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1675584	A1	20060705	EP 2004-789345	20040929
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
BR 2004014908	A	20061107	BR 2004-14908	20040929
CN 1913884	A	20070214	CN 2004-80032677	20040929
JP 2007507428	T	20070329	JP 2006-528331	20040929
JP 2006193533	A	20060727	JP 2006-96143	20060330
IN 2006KN00838	A	20070413	IN 2006-KN838	20060405

PRIORITY APPLN. INFO.:		US 2002-369066P	P	20020329
		US 2003-405945	A2	20030331
		JP 2003-579810	A3	20030331
		US 2003-675927	A	20030929
		WO 2004-US32161	W	20040929

OTHER SOURCE(S): MARPAT 141:71544

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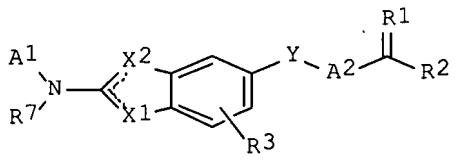

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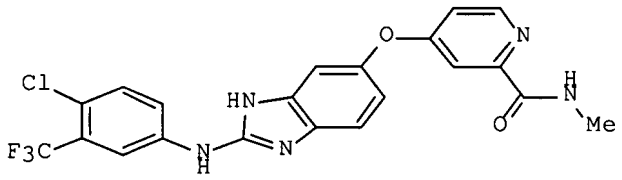

II

AB The title compds. I [wherein X1, X2 = N, NR4, O, S (with provisos); Y = O, S; A1 = (un)substituted alkyl, (hetero)cycloalkyl(alkyl), (hetero)aryl(alkyl), etc.; A2 = (un)substituted heteroaryl; R1 = O, H; R2 = NR5R6, OH; or CR1R2 = (un)substituted heterocycloalkyl, heteroaryl; R3 = H, halo, alkyl, alkoxy; R4 = H, OH, (di)alkylamino, alkyl; R5, R6 = H, (un)substituted (cyclo)alkyl, alkoxyalkyl, aminoalkyl, amidoalkyl, acyl, heterocyclyl, (hetero)aryl, etc.; or R5 and R6 are taken together to form (un)substituted heterocyclyl or heteroaryl; R7 = alkyl; and pharmaceutically acceptable salts, esters, or prodrugs] were prepared as Raf kinase inhibitors. Examples include synthetic methods and phys. data for 1400 compds., as well as descriptions of two Raf kinase bioassays. For instance, 4-amino-3-nitrophenol and (4-chloropyridin-2-yl)-N-methylcarboxamide were coupled using potassium bis(trimethylsilyl)amide and K2CO3 in DMF to give 4-[(4-amino-3-nitrophenyl)oxy]-N-methylpyridine-2-carboxamide. Pd-catalyzed hydrogenation, followed by cyclization with 4-chloro-3-(trifluoromethyl)benzeneisothiocyanate in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide•HCl in THF provided the benzimidazole II. One thousand ninety-four compds. inhibited Raf kinase activity with IC50 < 5 μM in a Raf/Mek filtration assay or a biotinylated Raf screen. Thus, I and their pharmaceutical compns., which may comprise at least one addnl. agent, are useful for the **treatment** of Raf kinase mediated disorders, such as **cancer** (no data).

L53 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 6
ACCESSION NUMBER: 2003:796477 CAPLUS Full-text
DOCUMENT NUMBER: 139:307759
TITLE: Preparation of substituted benzazoles as Raf kinase inhibitors
INVENTOR(S): **Renhowe, Paul A.; Ramurthy, Savithri; Amiri, Payman; Levine, Barry Haskell; Poon, Daniel J.; Subramanian, Sharadha; Sung, Leonard; Fantl, Wendy**
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 259 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082272	A1	20031009	WO 2003-US10117	20030331
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2480638	A1	20031009	CA 2003-2480638	20030331
AU 2003226211	A1	20031013	AU 2003-226211	20030331
EP 1499311	A1	20050126	EP 2003-745683	20030331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				

PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK						
BR 2003008854	A	20050222	BR 2003-8854			20030331
CN 1655779	A	20050817	CN 2003-812193			20030331
JP 2005529089	T	20050929	JP 2003-579810			20030331
NZ 535985	A	20070427	NZ 2003-535985			20030331
IN 2004KN01433	A	20051230	IN 2004-KN1433			20040927
NO 2004004617	A	20041228	NO 2004-4617			20041026
JP 2006193533	A	20060727	JP 2006-96143			20060330
PRIORITY APPLN. INFO.:			US 2002-369066P		P	20020329
			JP 2003-579810		A3	20030331
			WO 2003-US10117		W	20030331

OTHER SOURCE(S): MARPAT 139:307759
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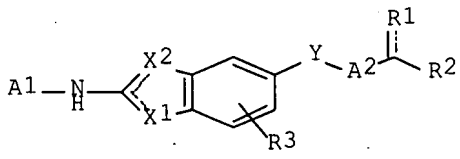

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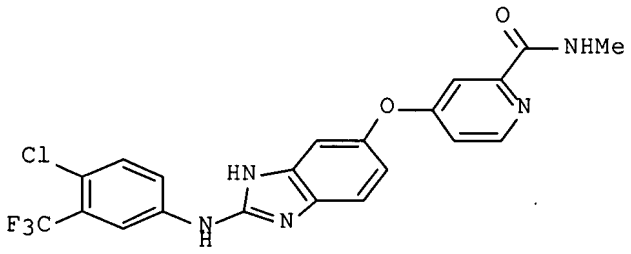


II

AB The title compds. [I; X1, X2 = N, NR4, O, S (with the provisos); Y = O, S; A1 = (un)substituted alkyl, cycloalkyl, aryl, etc.; A2 = (un)substituted heteroaryl; R1 = O, H, and R2 = NR5R6, OH; or CR1R2 = (un)substituted heterocycloalkyl, heteroaryl; R3 = H, halo, alkyl, alkoxy; R4 = H, OH, (di)alkylamino, alkyl; R5, R6 = H, (un)substituted alkyl, alkoxyalkyl, etc.; or R5 and R6 are taken together to form (un)substituted heterocyclyl or heteroaryl], useful for inhibition of Raf kinase activity in a human or animal subject, were prepared E.g., a 3-step synthesis of the benzimidazole II (starting from 4-amino-3-nitrophenol and (4-chloropyridin-2-yl)-N-methylcarboxamide), was given. The compds. of examples 1-1094 showed a Raf kinase inhibitory activity at an IC50 of less than 5 μM. A composition comprising the compound I is claimed. The new compds. compns. may be used either alone or in combination with at least one addnl. agent for the **treatment** of a Raf kinase mediated disorder, such as **cancer**.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 14 OF 20 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 2003-300397 [29] WPIX
DOC. NO. CPI: C2003-078099 [29]

TITLE: New indazole benzimidazole compounds are tyrosine and serine/threonine kinase inhibitors, useful for **treating** e.g. **cancer**, diabetes, Alzheimer's disease, central nervous system disorders, and reducing chronic neuronal damage

DERWENT CLASS: B02

INVENTOR: MACHAJEWSKI T; MACHAJEWSKI T D; MCBRIDE C; MCCREA B; MCCREA W R; PECCHI S; **POON D**; **POON D J**; **RENHOWE P A**; SHAFER C M; SILVER J; SILVER J B; THOMAS T; JANSEN J M; SHAFER C

PATENT ASSIGNEE: (CHIR-C) CHIRON CORP; (JANS-I) JANSEN J M; (MCBR-I) MCBRIDE C; (RENH-I) RENHOWE P A; (SHAF-I) SHAFER C

COUNTRY COUNT: 97

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2003004488	A1	20030116	(200329)*	EN	218[0]	
US 20030207883	A1	20031106	(200374)	EN		
EP 1401831	A1	20040331	(200424)	EN		
AU 2002354727	A1	20030121	(200452)	EN		
JP 2004536113	W	20041202	(200479)	JA	736	
US 20060079564	A1	20060413	(200626)	EN		
US 7064215	B2	20060620	(200641)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2003004488	A1	WO 2002-US20844	20020702
US 20030207883	A1 Provisional	US 2001-302791P	20010703
US 20060079564	A1 Provisional	US 2001-302791P	20010703
AU 2002354727	A1	AU 2002-354727	20020702
EP 1401831	A1	EP 2002-752132	20020702
US 20030207883	A1	US 2002-187967	20020702
US 20060079564	A1 CIP of	US 2002-187967	20020702
EP 1401831	A1	WO 2002-US20844	20020702
JP 2004536113	W	WO 2002-US20844	20020702
JP 2004536113	W	JP 2003-510655	20020702
US 20060079564	A1	US 2005-261995	20051027
US 7064215	B2 Provisional	US 2001-302791P	20010703
US 7064215	B2	US 2002-187967	20020702

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1401831 A1	Based on	WO 2003004488 A
AU 2002354727 A1	Based on	WO 2003004488 A
JP 2004536113 W	Based on	WO 2003004488 A

PRIORITY APPLN. INFO: US 2001-302791P 20010703
US 2002-187967 20020702
US 2005-261995 20051027

AN 2003-300397 [29] WPIX

AB WO 2003004488 A1 UPAB: 20060119
NOVELTY - Indazole benzimidazole compounds (I)-(VII) are new.
DETAILED DESCRIPTION - Indazole benzimidazole compounds of formula (I)-(VII) are new.

Z1-Z4 = C or N;
R1a = H, F, Cl or Br;
R2a = e.g. amino, alkyl, H, F, Cl, Br, CN, NO2 or CO2H; R3a = H, F, Cl, Br or optionally substituted alkoxy; R4a = H;
R5a-R5f, R8a-R8f = e.g. alkyl, alkoxy or absent; R6a, R7a = e.g. heterocyclylheterocyclyl, or absent; R9a-R9g, R10a = H;
R1b-R1g = e.g. arylalkoxy or OH; R2b, R2c = e.g. guanidinyl, amino, alkyl, or OH; or R2b+R3b, R2c+R3c, R2d+R3d, R2e+R3e, R2f+R3f, R2g+R3g = -OCH2O- forming a fused 5-membered ring that includes 2 O atoms; R3b = e.g. alkyl, amino, alkoxy, or CN; R4b-R4g = e.g. arylalkoxy, or OH; R6b-R6g = e.g. alkyl, or CO2H; R7b-R7g = e.g. alkyl, absent, or CO2H; R10b-R10g = H or optionally substituted alkyl; R3c, R3e-R3g = e.g. -C(O)NH-alkyl, NO2 or CO2H; R2d = e.g. alkylaminoalkyl or arylaminoalkyl; R3d = e.g. alkyl, or CN;
R2e = e.g. guanidinyl or OH; R2f, R2g = e.g. alkoxyalkyl or arylalkoxyalkyl;
provided that:
(i) when Z1 = N, then R5a-R5g = absent; (ii) when Z2 = N, then R6a-R6g = absent; (iii) when Z3 = N, then R7a-R7g = absent; (iv) when Z4 = N, then R8a-R8g = absent; (v) at least one of R1a-R8a, R1b-R8b is not H; (vi) at least one of Z2 or Z3 = C and at least one of R6c or R7c = heterocyclylalkoxy, arylalkoxy, alkoxyalkoxy, heterocyclylheterocyclyl, arylheterocyclyl, cycloalkylheterocyclyl, heterocyclyloxy, aryloxy, (alkyl)(heterocyclyl)amino, heterocyclylalkylamino, arylalkylamino, heterocyclylamino, C(O)NH-aryl, -C(O)NH-heterocyclyl, -C(O)N(alkyl)(heterocyclyl), -C(O)-heterocyclyl (all optionally substituted) Br or CO2H; (vii) at least one of Z2 or Z3 = C and at least one of R6f or R7f = piperidinyl substituted heterocyclyl, heterocyclyl substituted piperidinyl, hydroxymethyl substituted piperidinyl, 3-alkyl substituted piperazinyl, 3,5-dialkyl substituted piperazinyl, N-hydroxyalkyl substituted piperazinyl, 1,4-diazacycloheptyl, 1-aza-4-oxacycloheptane, N-ethylpiperazinyl, N-isopropylpiperazinyl, N-sec-butylpiperazinyl, N-2-pyridyl substituted piperazinyl, N-3-pyridyl substituted piperazinyl, N-4-pyridyl substituted piperazinyl, -NHCH2-pyridyl, imidazolyl, 3-alkyl substituted morpholinyl, 3,5-dialkyl substituted morpholinyl, 4-hydroxy substituted piperidinyl, 4-aryl substituted piperidinyl, 4-hydroxy-4-phenyl substituted piperidinyl, cyclohexylpiperazinyl, cyclopentylpiperazinyl, N-alkyl substituted diazabicycloalkane, -N(Me)(N-alkyl(4-piperidinyl)), piperazinyl (further substituted by a -C(O)-alkyl group bonded to one of the N atoms of the piperazinyl group), -NHCH2CH2CH2-imidazolyl, -NHCH2CH2CH2-pyrrolidinyl, -NHCH2CH2CH2-morpholinyl, -NHCH2CH2CH2-piperazinyl, -NHCH2CH2CH2-piperidinyl, -NHCH2CH2CH2-pyridyl, -NHCH2CH2-imidazolyl, -NHCH2CH2-pyrrolidinyl, -NHCH2CH2-morpholinyl, -NHCH2CH2-piperazinyl, -NHCH2CH2-piperidinyl, -NHCH2CH2-pyridyl, -OCH2-pyrrolidinyl, -OCH2CH2-pyrrolidinyl, -OCH2CH2CH2-pyrrolidinyl, piperazinyl (further substituted by a -CH2C(O)O-alkyl group bonded to one of the N atoms of the piperazinyl group), piperazinyl groups further substituted with a -C(O)O-alkyl group bonded to one of the N atoms of the piperazinyl group, hydroxypyrrolidinyl, hydroxypiperidinyl, -OCH2-pyridyl, piperidinylamino, pyridyloxy (substituted by a -C(O)NH-alkyl bonded to a carbon atom of the pyridine ring of the pyridyloxy group), pyridyloxy (substituted by a -C(O)N(alkyl)2 bonded to a carbon atom of the pyridine ring of the pyridyloxy), (all optionally substituted), dimethylaminoalkyl substituted pyrrolidinyl, dialkylamino substituted pyrrolidinyl, cyclobutylpiperazinyl, or pyrrolidinyl (substituted with both dialkylamino and alkyl); and
(viii) either R1g = NH2 or optionally substituted pyrrolidinylalkylamino; R2g = thiazolylalkylamino, pyrrolidinylalkylamino or aminoalkyl (all optionally substituted); or R3g = thiazolylalkylamino, benzimidazolylalkylamino, imidazolylalkylamino, furanylalkylamino or arylalkylamino (all optionally substituted).
Full Definitions are given in the DEFINITIONS (Full Definitions) field.
ACTIVITY - Cytostatic, Antidiabetic; Nootropic; Neuroprotective; Cerebroprotective; Vasotropic; Antiparkinsonian; Anticonvulsant; Anti-HIV.

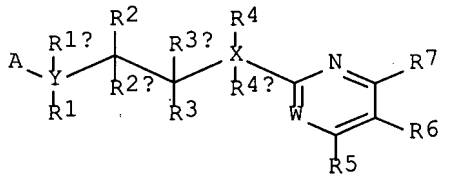
MECHANISM OF ACTION - Serine/Threonine Kinase (e.g. flt-1 (VEGFR-2), KDR (VEGFR-2), Flk-1, bFGFR, GSK-3, NEK-2, CHK-1, Tie-2, PDGF and cdc 2) Inhibitor; Tyrosine Kinase Inhibitor. In an in vitro kinase assay to determine inhibition of serine/threonine kinase, compounds (I)-(VII) displayed IC50 values of less than 10 microM.
USE - For **treating cancer**, diabetes, Alzheimer's disease, central nervous system disorders; for stimulating insulin-dependent process; for prolonging immune responses; for reducing the splitting of centrosomes; reducing neurodegeneration associated with acute damage e.g. in cerebral ischemia, traumatic brain injury; reducing chronic neuronal damage associated with Alzheimer's disease, Huntington's disease, Parkinson's disease, AIDS associated dementia, amyotrophic lateral sclerosis and multiple sclerosis.
ADVANTAGE - The compounds exhibit tyrosine and serine/threonine kinase inhibitory activity and stimulate insulin-dependent process.

L53 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 2002:185092 CAPLUS Full-text
DOCUMENT NUMBER: 136:247598
TITLE: Preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors
INVENTOR(S): Nuss, John M.; Harrison, Stephen D.; Ring, David B.; Boyce, Rustum S.; Johnson, Kirk; Pfister, Keith B.; **Ramurthy, Savithri**; Seely, Lynn; Wagman, Allan S.; Desai, Manoj; **Levine, Barry H.**
PATENT ASSIGNEE(S): Chiron Corporation, USA
SOURCE: PCT Int. Appl., 268 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020495	A2	20020314	WO 2001-US42081	20010906
WO 2002020495	A3	20020620		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 200195026	A	20020322	AU 2001-95026	20010906
EP 1317433	A2	20030611	EP 2001-975734	20010906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004514656	T	20040520	JP 2002-525117	20010906
CN 1592743	A	20050309	CN 2001-818425	20010906
IN 2003KN00277	A	20050311	IN 2003-KN277	20030305
PRIORITY APPLN. INFO.:			US 2000-230480P	P 20000906
			WO 2001-US42081	W 20010906

OTHER SOURCE(S): MARPAT 136:247598

GI



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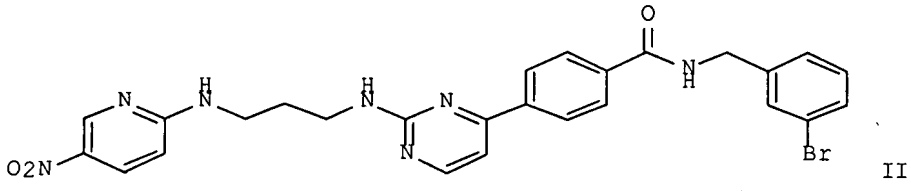


II

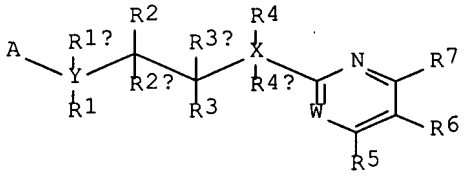
AB Title compds. I [wherein W = (un)substituted C or N; X and Y = independently N, O, or (un)substituted C; A = (un)substituted (hetero)aryl; R1, R1a, R2, R2a, R3, R3a, R4, and R4a = independently H, OH, alkoxy, acyl, (hetero)aryl, or (un)substituted (cyclo)alkyl, amino(alkyl), etc. ; R5 and R7 = independently H, halo, alkoxy, guanidinyl, (bi)aryl, hetero(bi)aryl, heterocycloalkyl, arylsulfonamido, or (un)substituted (cyclo)alkyl, amino(alkoxy), or amidino; R6 = H, halo, carboxyl, NO2, (cyclo)amido, (cyclo)amidino, (cyclo)imido, CN, alkoxy, acyl(oxy), guanidinyl, (hetero)aryl, heterocyclo(alkyl), arylsulfonyl, arylsulfonamido, or (un)substituted alkyl, amino, etc.] were prepared as glycogen synthase kinase 3 (GSK3) inhibitors. For example, 2-chloro-5-nitropyridine was aminated by H2N(CH2)3NH2 and the product N-acylated by benzotriazolecarboxamidinium tosylate to give the alkylguanidine. The latter was cyclocondensed with resin-bound 4-(MeCO)C6H4CONHCH2C6H4Br-3 and Cs2CO3 to afford, after resin cleavage, the pyrimidinamine II. The most preferred compds. of the invention exhibited inhibitory activity against human GSK3β in a cell free assay with IC50 values of < 1 μM. Thus, I and compns. containing I may be employed alone or in combination with other pharmacol. active agents in the **treatment** of disorders mediated by GSK3 activity, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency, or **cancer** (no data).

L53 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:814853 CAPLUS Full-text
DOCUMENT NUMBER: 137:325431
TITLE: Preparation of aminopyrimidines and -pyridines as glycogen synthase kinase 3 inhibitors
INVENTOR(S): Nuss, John M.; Harrison, Stephen D.; Ring, David B.; Boyce, Rustum S.; Johnson, Kirk; Pfister, Keith B.; **Ramurthy, Savithri**; Seely, Lynn; Wagman, Allan S.; Desai, Manjo; **Levine, Barry H.**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 134 pp., Cont.-in-part of U.S. 6,417,185.

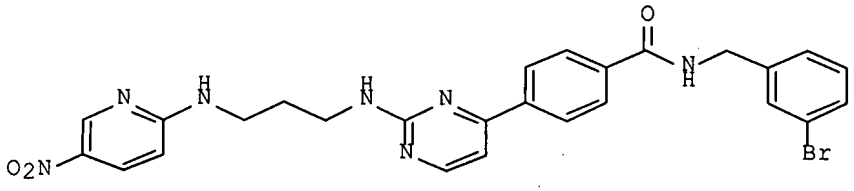
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2002156087	A1	20021024	US 2001-949035		20010906
US 7045519	B2	20060516			
US 6417185	B1	20020709	US 1999-336038		19990618
US 2003130289	A1	20030710	US 2002-309535		20021203
US 7037918	B2	20060502			
US 2006089369	A1	20060427	US 2005-220400		20050906
PRIORITY APPLN. INFO.:			US 1998-89978P	P	19980619
			US 1999-336038	A2	19990618
			US 2000-230480P	P	20000906
			US 1999-336098	A3	19990618
			US 2001-949035	A3	20010906

OTHER SOURCE(S): MARPAT 137:325431
GI



I



II

AB Title compds. I [wherein W = (un)substituted C or N; X and Y = independently N, O, or (un)substituted C; A = (un)substituted (hetero)aryl; R1, R1a, R2, R2a, R3, R3a, R4, and R4a = independently H, OH, alkoxy, acyl, (hetero)aryl, or (un)substituted (cyclo)alkyl, amino(alkyl), etc. ; R5 and R7 = independently H, halo, alkoxy, guanidinyl, (bi)aryl, hetero(bi)aryl, heterocycloalkyl, arylsulfonamido, or (un)substituted (cyclo)alkyl, amino(alkoxy), or amidino; R6 = H, halo, carboxyl, NO2, (cyclo)amido, (cyclo)amidino, (cyclo)imido, CN, alkoxy, acyl(oxy), guanidinyl, (hetero)aryl, heterocyclo(alkyl), arylsulfonyl, arylsulfonamido, or (un)substituted alkyl, amino, etc.] were prepared as glycogen synthase kinase 3 (GSK3) inhibitors. For example, 2-chloro-5-nitropyridine was aminated by H2N(CH2)3NH2 and the product N-acylated by benzotriazolecarboxamidinium tosylate to give the alkylguanidine. The latter was cyclocondensed with resin-bound 4-(MeCO)C6H4CONHCH2C6H4Br-3 and Cs2CO3 to afford, after resin cleavage, the pyrimidinamine II. The most preferred compds. of the invention exhibited

inhibitory activity against human GSK3β in a cell free assay with IC50 values of < 1 μM. Thus, I and compns. containing I may be employed alone or in combination with other pharmacol. active agents in the **treatment** of disorders mediated by GSK3 activity, such as diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency, or **cancer** (no data).

REFERENCE COUNT: 306 THERE ARE 306 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 17 OF 20 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:57035 BIOSIS Full-text
DOCUMENT NUMBER: PREV200300057035
TITLE: Inhibitors of glycogen synthase kinase 3.
AUTHOR(S): Nuss, John M. [Inventor, Reprint Author]; Harrison, Stephen D. [Inventor]; Ring, David B. [Inventor]; Boyce, Rustum S. [Inventor]; Brown, Sean P. [Inventor]; Goff, Dane A. [Inventor]; Johnson, Kirk W. [Inventor]; Pfister, Keith B. [Inventor]; **Ramurthy, Savithri** [Inventor]; **Renhowe, Paul A.** [Inventor]; Seely, Lynn [Inventor]; **Subramanian, Sharadha** [Inventor]; Wagman, Allan S. [Inventor]; Zhou, Xiaohui A. [Inventor]
CORPORATE SOURCE: Danville, CA, USA
ASSIGNEE: Chiron Corporation
PATENT INFORMATION: US 6489344 20021203
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Dec 3 2002) Vol. 1265, No. 1. http://www.uspto.gov/web/menu/patdata.html. e-file. ISSN: 0098-1133 (ISSN print).
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 22 Jan 2003
Last Updated on STN: 22 Jan 2003

AB New pyrimidine or pyridine based compounds, compositions and methods of inhibiting the activity of glycogen synthase kinase (GSK3) in vitro and of **treatment** of GSK3 mediated disorders in vivo are provided. The methods, compounds and compositions of the invention may be employed alone, or in combination with other pharmacologically active agents in the **treatment** of disorders mediated by GSK3 activity, such as in the **treatment** of diabetes, Alzheimer's disease and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency or **cancer**.

L53 ANSWER 18 OF 20 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 2002:409558 BIOSIS Full-text
DOCUMENT NUMBER: PREV200200409558
TITLE: Characterization of potent tyrosine kinase inhibitors that modulate angiogenesis and proliferation of selected cancer cell lines.
AUTHOR(S): Wiesmann, Marion [Reprint author]; Lee, Sang Hoon [Reprint author]; Wernette-Hammond, Mary-Ellen [Reprint author]; Lapointe, Gena [Reprint author]; Cheryl, Goldbeck [Reprint author]; Nordahl, Lara [Reprint

author]; Heise, Carla [Reprint author]; **Amiri, Payman** [Reprint author]; **Renhowe, Paul** [Reprint author]; Harrison, Stephen [Reprint author]; Harris, Alex [Reprint author]
CORPORATE SOURCE: Chiron Corp., Emeryville, CA, USA
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (March, 2002) Vol. 43, pp. 849. print.
Meeting Info.: 93rd Annual Meeting of the American Association for Cancer Research. San Francisco, California, USA. April 06-10, 2002.
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LANGUAGE: English
ENTRY DATE: Entered STN: 31 Jul 2002
Last Updated on STN: 23 Sep 2002

L53 ANSWER 19 OF 20 WPIX COPYRIGHT 2007 THE THOMSON CORP on STN
ACCESSION NUMBER: 2000-126535 [11] WPIX
CROSS REFERENCE: 2002-393835
DOC. NO. CPI: C2000-038528 [11]
TITLE: New pyrimidine or pyridine based compounds for inhibiting glycogen synthase kinase 3 for **treating** e.g. **cancer**, diabetes and neurodegenerative disorders
DERWENT CLASS: B02; B03
INVENTOR: BOYCE R S; BOYCE S; BROWN S P; GOFF D; GOFF D A; HARRISON D; HARRISON S D; JOHNSON K; JOHNSON K W; **NUSS J M**; **NUSS M**; PFISTER B; PFISTER K B; **RAMURTHY S**; RENHOWE A; **RENHOWE P A**; RING B; RING D B; SEELY L; **SUBRAMANIAN S**; WAGMAN A S; ZHOU A; ZHOU X A
PATENT ASSIGNEE: (CHIR-C) CHIRON CORP
COUNTRY COUNT: 85

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9965897	A1	19991223	(200011)*	EN	261[0]	
AU 9949566	A	20000105	(200024)	EN		
EP 1087963	A1	20010404	(200120)	EN		
CN 1312807	A	20010912	(200202)	ZH		
KR 2001083055	A	20010831	(200215)	KO		
US 6417185	B1	20020709	(200253)	EN		
US 6489344	B1	20021203	(200301)	EN		
US 20030130289	A1	20030710	(200347)	EN		
JP 2003527303	W	20030916	(200362)	JA	439	
EP 1087963	B1	20040825	(200456)	EN		
DE 69919707	E	20040930	(200465)	DE		
IN 2000000609	P2	20050311	(200555)	EN		
DE 69919707	T2	20050901	(200559)	DE		
US 7037918	B2	20060502	(200629)	EN		
KR 581199	B1	20060517	(200724)	KO		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 9965897 A1	WO 1999-US13809 19990618
US 6417185 B1 Provisional	US 1998-89978P 19980619
US 6489344 B1 Provisional	US 1998-89978P 19980619
US 20030130289 A1 Provisional	US 1998-89978P 19980619
US 7037918 B2 Provisional	US 1998-89978P 19980619
AU 9949566 A	AU 1999-49566 19990618
CN 1312807 A	CN 1999-809570 19990618
DE 69919707 E	DE 1999-619707 19990618
DE 69919707 T2	DE 1999-619707 19990618
EP 1087963 A1	EP 1999-933522 19990618
EP 1087963 B1	EP 1999-933522 19990618
DE 69919707 E	EP 1999-933522 19990618
DE 69919707 T2	EP 1999-933522 19990618
US 6417185 B1	US 1999-336038 19990618
US 6489344 B1	US 1999-336098 19990618
US 20030130289 A1 Div Ex	US 1999-336098 19990618
US 7037918 B2 Div Ex	US 1999-336098 19990618
EP 1087963 A1	WO 1999-US13809 19990618
JP 2003527303 W	WO 1999-US13809 19990618
EP 1087963 B1	WO 1999-US13809 19990618
DE 69919707 E	WO 1999-US13809 19990618
IN 2000000609 P2	WO 1999-US13809 19990618
DE 69919707 T2	WO 1999-US13809 19990618
JP 2003527303 W	JP 2000-554722 19990618
IN 2000000609 P2	IN 2000-KN609 20001207
KR 2001083055 A	KR 2000-714450 20001219
US 20030130289 A1	US 2002-309535 20021203
US 7037918 B2	US 2002-309535 20021203
KR 581199 B1	WO 1999-US13809 19990618
KR 581199 B1	KR 2000-714450 20001219

FILING DETAILS:

PATENT NO	KIND		PATENT NO	
DE 69919707	E	Based on	EP 1087963	A
DE 69919707	T2	Based on	EP 1087963	A
US 20030130289	A1	Div ex	US 6489344	B
US 7037918	B2	Div ex	US 6489344	B
AU 9949566	A	Based on	WO 9965897	A
EP 1087963	A1	Based on	WO 9965897	A
JP 2003527303	W	Based on	WO 9965897	A
EP 1087963	B1	Based on	WO 9965897	A
DE 69919707	E	Based on	WO 9965897	A
DE 69919707	T2	Based on	WO 9965897	A
KR 581199	B1	Previous Publ	KR 2001083055	A
KR 581199	B1	Based on	WO 9965897	A

PRIORITY APPLN. INFO: US 1998-89978P 19980619
US 1999-336038 19990618
US 1999-336098 19990618
US 2002-309535 20021203

AN 2000-126535 [11] WPIX

CR 2002-393835

AB WO 1999065897 A1 UPAB: 20060115
NOVELTY - Pyrimidine and pyridine derivatives (I) are new.
DETAILED DESCRIPTION - Pyrimidine and pyridine derivatives of formula (I) and their salts are new. W = C or N;
X, Y = N, O or optionally substituted C; A = aryl or heteroaryl (both optionally substituted); R1-R4 = H, OH or lower alkyl, cyclo lower alkyl,

alkylaminoalkyl, lower alkoxy, amino, alkylamino, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, aralkylcarbonyl, heteroaralkylcarbonyl, aryl or heteroaryl (all optionally substituted);
R1'-R4' = H or optionally substituted lower alkyl; R5, R7 = H, halo or lower alkyl, cycloalkyl, alkoxy, amino, aminoalkoxy, alkylamino, aralkylamino, heteroaralkylamino, arylamino, heteroarylamino, cycloimido, heterocycloimido, amidino, cycloamidino, guanidinyl, aryl, biaryl, aryl, heteroaryl, heterobiaryl, heterocycloalkyl or arylsulfonamido; R6 = H, halo, carboxy, NO2, amino, amido, imido, CN or lower alkyl, lower alkoxy, alkylcarbonyl, arylcarbonyl, heteroarylcarbonyl, aralkylcarbonyl, heteroaralkylcarbonyl, alkylcarbonyloxy, arylcarbonyloxy, aralkylcarbonyloxy, alkylaminocarbonyloxy, arylaminocarbonyloxy, formyl, lower alkylcarbonyl, lower alkoxycarbonyl, aminocarbonyl, aminoaryl, alkylsulfonyl, sulfonamido, aminoalkoxy, alkylamino, heteroarylamino, alkylcarbonylamino, alkylaminocarbonylamino, arylaminocarbonylamino, aralkylcarbonylamino, heteroaralkylcarbonylamino, arylcarbonylamino, heteroarylcarbonylamino cycloamido, cyclothioamido, cycloamidino, heterocycloamidino, cycloimido, heterocycloimido, guanidinyl, aryl, heteroaryl, heterocyclyl, heterocycloalkyl, arylsulfonyl or arylsulfonamido. ACTIVITY - Cytostatic; vasotropic; nootropic; neuroprotective; antidiabetic; anorectic.
No details of test given.
MECHANISM OF ACTION - Glycogen synthase kinase 3 (GSK3) inhibitor.
In a cell free assay using human GSK3beta, (I) e.g. 4-(2-((2-(2-pyridyl)ethyl)amino)pyrimidinyl-4-yl)benzamide (Ia) exhibited an IC50 value of 1 micro-M or less.
USE - Used for **treating** diabetes, Alzheimer's disease, and other neurodegenerative disorders, obesity, atherosclerotic cardiovascular disease, essential hypertension, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder and **cancer** (claimed).

L53 ANSWER 20 OF 20 JAPIO (C) 2007 JPO on STN
ACCESSION NUMBER: 2006-193533 JAPIO Full-text
TITLE: SUBSTITUTED BENZAZOLE AND USE THEREOF AS RAF KINASE INHIBITOR
INVENTOR: **RENHOWE PAUL A; RAMURTHY SAVITHRI; AMIRI PAYMAN; LEVINE BARRY HASKELL; POON DANIEL J; SUBRAMANIAN SHARADHA; SUNG LEONARD ; FANTL WENDY**
PATENT ASSIGNEE(S): CHIRON CORP
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 2006193533	A	20060727	Heisei	

APPLICATION INFORMATION
STN FORMAT: JP 2006-96143 20060330
ORIGINAL: JP2006096143 Heisei
PRIORITY APPLN. INFO.: US 2002-369066 20020329
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2006
AN 2006-193533 JAPIO Full-text
AB PROBLEM TO BE SOLVED: To provide a new substituted benzazole compounds, pharmaceutically permissible salts, esters and prodrugs thereof, to provide a composition of the new compound with a pharmaceutically permissible carrier, and to provide use of the new compound in **treatment** and **prevention** of **cancer** either alone or in combination with at least one additional agent.

SOLUTION: The new substituted benzazole compounds of formula (I), compositions and methods of inhibition of Raf kinase activity in a human or animal subject are provided. The new compounds and compositions may be used for the **treatment** of a Raf kinase mediated disorder (such as **cancer**), either alone or in combination with at least one additional agent. The compound is useful for **treatment** of **cancers** which **cancers** are **carcinoma** (such as lung **cancer**, pancreatic **cancer**, thyroid **cancer**, urinary bladder **cancer** or colonic **cancer**), bone marrow **carcinosis** (such as myelogenic **leukemia**) and adenoma (such as **choriocarcinoma**).

FILE 'HOME' ENTERED AT 11:15:22 ON 15 MAY 2007

```
=> d que l4; d his ful
L1              STR
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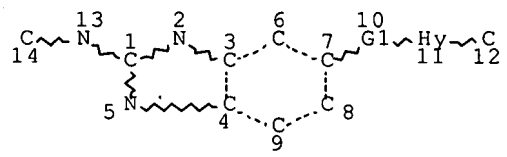

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VAR G1=O/S
NODE ATTRIBUTES:
NSPEC    IS RC     AT  12
NSPEC    IS RC     AT  14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
L2  (      1369)SEA FILE=REGISTRY SSS FUL L1
L3              STR
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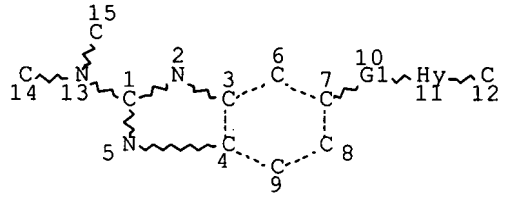

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VAR G1=O/S
NODE ATTRIBUTES:
NSPEC    IS RC     AT  12
NSPEC    IS RC     AT  14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  15

STEREO ATTRIBUTES: NONE
L4            2 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

     (FILE 'REGISTRY' ENTERED AT 10:40:03 ON 15 MAY 2007)
               ACT SHOB6759/A
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L1              STR
L2  (      1369)SEA SSS FUL L1
L3              STR
L4            2 SEA SUB=L2 SSS FUL L3
              ---------
               D QUE SAT
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```
     FILE 'CAPLUS' ENTERED AT 10:40:35 ON 15 MAY 2007
L5             2 SEA ABB=ON  PLU=ON  L4
                 D 1-2 IBIB ABS HITSTR

     FILE 'CAOLD' ENTERED AT 10:40:49 ON 15 MAY 2007
L6             0 SEA ABB=ON  PLU=ON  L4

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:40:58 ON 15 MAY 2007
L7             0 SEA ABB=ON  PLU=ON  L4

     FILE 'REGISTRY' ENTERED AT 10:41:55 ON 15 MAY 2007
                 ACT SHOB675/A
                ---------
L8               STR
L9            1369 SEA SSS FUL L8
                ---------
                 D QUE STAT

     FILE 'CAPLUS' ENTERED AT 10:42:32 ON 15 MAY 2007
L10             12 SEA ABB=ON  PLU=ON  L9
L11             10 SEA ABB=ON  PLU=ON  L10 NOT L5
L12              2 SEA ABB=ON  PLU=ON  L11 AND (?CANCER? OR ?CARCIN? OR
                   ?TUMOUR? OR ?TUMOR? OR ?NEOPLAS?)
                 E ANTITUMOR AGENTS+ALL/CT
L13        240743 SEA ABB=ON  PLU=ON  "ANTITUMOR AGENTS"+OLD/CT
                 E NEOPLASM+ALL/CT
L14        140282 SEA ABB=ON  PLU=ON  NEOPLASM+OLD/CT
                 E MELANOMA+ALL/CT
L15         19182 SEA ABB=ON  PLU=ON  MELANOMA+OLD/CT
                 E BREAST CANCER+ALL/CT
                 E E2+ALL
L16         57212 SEA ABB=ON  PLU=ON  "MAMMARY GLAND, NEOPLASM"+OLD/CT
                 E PROSTATE CANCER+ALL/CT
                 E E2+ALL
L17         25299 SEA ABB=ON  PLU=ON  "PROSTATE GLAND, NEOPLASM"+OLD/CT
                 E LUNG CANCER+ALL/CT
                 E E2+ALL
L18         38127 SEA ABB=ON  PLU=ON  "LUNG, NEOPLASM"+OLD/CT
                 E THYROID CANCER+ALL/CT
L19          7127 SEA ABB=ON  PLU=ON  "THYROID GLAND, NEOPLASM"+OLD/CT
                 E BLADDER CANCER+ALL/CT
                 E GALLBLADDER CANCER+ALL/CT
                 E E11+ALL
L20           918 SEA ABB=ON  PLU=ON  "GALLBLADDER, NEOPLASM"+OLD/CT
                 E COLON CANCER+ALL/CT
L21        406855 SEA ABB=ON  PLU=ON  (L13 OR L14 OR L15 OR L16 OR L17 OR
                 L18 OR L19 OR L20)
                 SAV TEMP L21 SHOB1/A
                 E COLON CANCER+ALL/CT
                 E E2+ALL
                 E E29+ALL
L22         41206 SEA ABB=ON  PLU=ON  "INTESTINE, NEOPLASM"+OLD/CT
                 E LIVER CANCER+ALL/CT
                 E MYELOID LEUKEMIA+ALL/CT
L23          6144 SEA ABB=ON  PLU=ON  "MYELOID LEUKEMIA"+OLD/CT
                 E VILLOUS COLON ADENOMA+ALL/CT
                 E COLON ADENOMA+ALL/CT
                 E E2+ALL
L24           527 SEA ABB=ON  PLU=ON  "ADENOMA (L) COLONIC"+OLD/CT
                 D COST
```

```
                E COLON ADENOMA+ALL/CT
                E E3+ALL
L25          507 SEA ABB=ON  PLU=ON  "INTESTINE, NEOPLASM (L) COLON,
                ADENOMA"+OLD/CT
L26            0 SEA ABB=ON  PLU=ON  L11 AND (?MELANOMA? OR ?LEUKEM? OR
                ?LEUKAEM? OR ADENOMA)
L27            1 SEA ABB=ON  PLU=ON  L11 AND ((L13 OR L14 OR L15 OR L16 OR
                L17 OR L18 OR L19 OR L20) OR (L22 OR L23 OR L24 OR L25))
L28            2 SEA ABB=ON  PLU=ON  L11 AND THU/RL
L29            2 SEA ABB=ON  PLU=ON  L12 OR L27 OR L28
                SEL HIT L29 1-2 RN
                D 1-2

     FILE 'REGISTRY' ENTERED AT 10:59:08 ON 15 MAY 2007
L30           30 SEA ABB=ON  PLU=ON  (611212-56-7/BI OR 611213-07-1/BI OR
                611213-70-8/BI OR 611214-93-8/BI OR 611215-16-8/BI OR
                611216-17-2/BI OR 611223-31-5/BI OR 769960-01-2/BI OR
                769960-02-3/BI OR 769960-03-4/BI OR 769960-04-5/BI OR
                769960-05-6/BI OR 769960-06-7/BI OR 769960-07-8/BI OR
                769960-08-9/BI OR 769960-09-0/BI OR 769960-10-3/BI OR
                769960-11-4/BI OR 769960-12-5/BI OR 769960-13-6/BI OR
                769960-14-7/BI OR 769960-15-8/BI OR 769960-16-9/BI OR
                769960-19-2/BI OR 769960-20-5/BI OR 769960-82-9/BI OR
                769961-00-4/BI OR 769961-24-2/BI OR 774196-96-2/BI OR
                774196-97-3/BI)
                D QUE

     FILE 'CAOLD' ENTERED AT 10:59:42 ON 15 MAY 2007
L31            0 SEA ABB=ON  PLU=ON  L30

     FILE 'MEDLINE, BIOSIS, EMBASE' ENTERED AT 10:59:55 ON 15 MAY 2007
L32            0 SEA ABB=ON  PLU=ON  L30

     FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIX, JAPIO, PASCAL, DISSABS'
     ENTERED AT 11:00:13 ON 15 MAY 2007
L33           77 SEA ABB=ON  PLU=ON  "AMIRI P"?/AU
L34          157 SEA ABB=ON  PLU=ON  "FANTL W"?/AU
L35         5395 SEA ABB=ON  PLU=ON  ("HASKELL LEVINE B"? OR "LEVINE
                HASKELL B"? OR "LEVINE B"? OR "HASKELL B"?)/AU
L36          268 SEA ABB=ON  PLU=ON  "POON D"?/AU
L37           57 SEA ABB=ON  PLU=ON  ("RAMURTHY S"? OR "SAVITHRI R"?)/AU
L38         3979 SEA ABB=ON  PLU=ON  ("SUBRAMANIAN S"? OR "SHARADHA S"?)/AU
L39          884 SEA ABB=ON  PLU=ON  "SUNG L"?/AU
                SET REN ON
L40          110 SEA ABB=ON  PLU=ON  "RENHOWE P"?/AU
L41            8 SEA ABB=ON  PLU=ON  L33 AND ((L34 OR L35 OR L36 OR L37 OR
                L38 OR L39 OR L40))
L42            6 SEA ABB=ON  PLU=ON  L34 AND ((L35 OR L36 OR L37 OR L38 OR
                L39 OR L40))
L43           13 SEA ABB=ON  PLU=ON  L35 AND ((L36 OR L37 OR L38 OR L39 OR
                L40))
L44           16 SEA ABB=ON  PLU=ON  L36 AND ((L37 OR L38 OR L39 OR L40))
L45           29 SEA ABB=ON  PLU=ON  L37 AND ((L38 OR L39 OR L40))
L46           19 SEA ABB=ON  PLU=ON  L38 AND (L39 OR L40)
L47            6 SEA ABB=ON  PLU=ON  L39 AND L40
L48            6 SEA ABB=ON  PLU=ON  L33 AND L34 AND L35 AND L36 AND L37
                AND L38 AND L39 AND L40
L49           11 SEA ABB=ON  PLU=ON  ((L43 OR L44 OR L45 OR L46)) AND ((L13
                OR L14 OR L15 OR L16 OR L17 OR L18 OR L19 OR L20) OR (L22
                OR L23 OR L24 OR L25))
```

```
L50          30 SEA ABB=ON  PLU=ON  ((L43 OR L44 OR L45 OR L46)) AND
                (?CANCER? OR ?CARCIN? OR ?TUMOUR? OR ?TUMOR? OR ?NEOPLAS?
                OR ?MELANOMA? OR ?LEUKEM? OR ?LEUKAEM? OR ADENOMA(3A)
                COLON##)
L51          26 SEA ABB=ON  PLU=ON  L50 AND (TREAT? OR THERAP? OR PREVENT?)
L52          27 SEA ABB=ON  PLU=ON  L41 OR L42 OR L47 OR L48 OR L49 OR L51
L53          20 DUP REM L52 (7 DUPLICATES REMOVED)
                D 1-20 IBIB ABS

FILE 'HOME' ENTERED AT 11:15:22 ON 15 MAY 2007
                D QUE L4


FILE REGISTRY
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   14 MAY 2007  HIGHEST RN 934733-40-1
DICTIONARY FILE UPDATES:  14 MAY 2007  HIGHEST RN 934733-40-1

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FILE COVERS 1907 - 15 May 2007  VOL 146 ISS 21
FILE LAST UPDATED: 14 May 2007  (20070514/ED)

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FILE CAOLD
FILE COVERS 1907-1966
FILE LAST UPDATED:  01 May 1997 (19970501/UP)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.  Title keywords, authors, patent
```

assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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FILE MEDLINE
FILE LAST UPDATED: 10 May 2007 (20070510/UP). FILE COVERS 1950 TO DA

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS
FILE COVERS 1969 TO DATE.
CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 9 May 2007 (20070509/ED)

FILE EMBASE
FILE COVERS 1974 TO 15 May 2007 (20070515/ED)

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE WPIX
FILE LAST UPDATED: 10 MAY 2007 <20070510/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200730 <200730/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> New reloaded DWPI Learn File (LWPI) available as well <<<

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FILE JAPIO
FILE LAST UPDATED: 27 APR 2007 <20070427/UP>
FILE COVERS APRIL 1973 TO JANUARY 25, 2007

>>> GRAPHIC IMAGES AVAILABLE <<<

FILE PASCAL
FILE LAST UPDATED: 14 MAY 2007 <20070514/UP>
FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE
IN THE BASIC INDEX (/BI) FIELD <<<

FILE DISSABS
FILE COVERS 1861 TO 27 APR 2007 (20070427/ED)

FILE HOME